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US Army Corps of Engineers

Engineer Institute for Water Resources



### Performance Monitoring System:

# Summary of Lock Statistics for October - December 1985

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Summary Report 86-SR-2

**April 1986** 

#### UNCLASSIFIED

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Although the data are edited, the United States Government does not warrant its suitability for all purposes and does not assume responsibility for results of computations performed with these data.

#### 19. KEY WORDS (Continue on severee side if necessary and identify by block number)

Performance Monitoring System **PMS** statistics

#### 20. ABSTRACT (Continue on reverse ofth H necessary and identify by block number)

Lock Performance Monitoring data are collected at Corps locks by lock operators from observation and information provided by waterway operators. This quarterly summary is an overview of the collected statistics.

## PERFORMANCE MONITORING SYSTEM SUMMARY OF LOCK STATISTICS OCTOBER 1985 — DECEMBER 1985

Navigation Data Management and Applicatons Branch Navigation Division

U.S. Army Corps of Engineers Water Resources Support Center Institute for Water Resources Ft. Belvoir, Virginia 22060-5586



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April 1986

Summary Report 86-SR-2

#### **PREFACE**

This report is a product of the Navigation Data Management and Applications Branch of the U.S. Army Engineer Institute for Water Resources (WRSC-IWR). The information is compiled from statistics collected at the Corps locks in support of the lock Performance Monitoring System (PMS).

The study is managed by Miss Shilpa B. Patel under the supervision of Mr. Francis M. Sharp, Chief of the WRSC-IWR Navigation Data Management and Applications Branch, and Dr. Lloyd G. Antle, Chief of the WRSC-IWR Navigation Division. The Office of the Chief of Engineers (OCE) sponsors are Mr. Robert Schmidt, DAEN-CWO-M, and Mr. Robert M. Daniel, DAEN-CWP-D.

Requests to update or change the distribution, comments and questions can be directed to Frank Sharp (202-355-3083) or Robert Baldwin (202-653-1007). The information is produced and distributed quarterly.

JAMES R. HANCHEY

Director, Institute for Water Resources

#### CONTENTS

|   |   | I      | ?age                            |
|---|---|--------|---------------------------------|
| Introduction  | ·   |        | IX                              |
| Appendix A:   | Performance Monitoring System Quarterly October 1985 through December 1985  | Report |                                 |
| New Orleans St. Louis Di Vicksburg Di Division Off New York Dis Norfolk Dis Buffalo Dist Chicago Dist Detroit Dist Rock Island St. Paul Dis Portland Dis Seattle Dist Walla Walla Huntington D Louisville Di Pittsburgh D Jacksonville Mobile Distr Savannah Dis Wilmington D Galveston Di Little Rock Tulsa Distri | strict strict ice, NED trict trict trict rict rict District trict trict trict trict bistrict istrict istrict istrict istrict istrict istrict District ict District ict District |        | 1258901316718283147162123666775 |

Appendix B: Glossary

#### Introduction

The lock Performance Monitoring System (PMS) encompasses the collection, editing, maintenance and analysis of data collected at all Corps-owned and operated locks. The data have been collected since March of 1975 and consist of information describing the traffic through the locks as well as the physical aspects of lockages. The quarterly summary of selected statistics presented in the appendix provides an overview of the traffic and operation at each lock. The quarterly report is presented as a set of three tables for each Corps District. Information reported for each lock and chamber include:

- TABLE 1. A listing providing the name of the lock, the river on which the lock is and its dimensions. In those cases where there is no quarterly information, this table will be the only display for the district.
- TABLE 2. A table providing, by direction and total, the number of tows, commercial vessels other than tows, recreational vessels, barges (empty and loaded), commercial lockages, recreational lockages and tonnage.
- TABLE 3. A summary of approach, entry. chambering and exit times (maximum, minimum and average) and the number of delays, total delay time, maximum delay time and average delay time.

Although the summary information will be computed and displayed for chambers at which there is data for only one or two months of the quarter, the fact is noted on the report.

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

| EROC             | DISTRIC  | t name      | DIVISION NAME          | H             | ONTHS REPORTED |       |
|------------------|----------|-------------|------------------------|---------------|----------------|-------|
| 32<br>           | NEW ORL  |             | LOWER MISS VALLEY      |               | 11/85<br>      | 12/85 |
| RIVER            |          | LCODE-LOCK  | NAME                   | LEN/WID/DRAF  | T (FT/FT/FT)   |       |
| ATCHAFALA        | YA RIVER | 11-BERWICK  | LOCK                   | 0307/0045/11. | 0              |       |
| BAYOU TEC        |          | 31-KEYSTONE |                        | 0162/0036/12. | 0              |       |
| FRESHNATE        | R BAYOU  | 41-FRESHNAT | ER BAYOU LOCK          | 0600/0084/15. | 0              |       |
| <b>SULF INTR</b> | ACOASTAL | 01-PORT ALL | EN LOCK                | 1198/0084/15. | 0              |       |
|                  |          | 02-BAYOU SO | rrel lock              | 0800/0056/16. | 0              |       |
|                  |          | 03-INNER HR | BR NAVIGATION CANL LK  | 0646/0075/40. | 0              |       |
|                  |          | 04-ALGIERS  | LOCK                   | 0797/0075/15. | 0              |       |
|                  |          | 05-HARVEY L | DCK                    | 0425/0075/14. | 0              |       |
|                  |          | 06-Bayou bo | EUF LOCK               | 1158/0075/15. | 0              |       |
|                  |          | 07-VERMILLI | ON LOCK                | 1200/0056/14. | 0              |       |
|                  |          | 08-CALCASTE | U LOCK                 | 1205/0075/15. | 0              |       |
|                  | •        | 21-SCHOONER | BAYOU CONTROL STRUCT   | 9999/0075/14. | 0              |       |
|                  |          | 22-CATFISH  | POINT CONTROL STRUCT   | 9999/0056/16• | 0              |       |
|                  |          | 23-CALCASIE | U SALT NATER BARRIER   | 9999/0056/15. | 0              |       |
|                  |          | 77-LELAND B | d <del>iman</del> lock | 1200/0110/15. | 0              |       |
| OLD R            | IVER     | 51-OLD RIVE | r lock                 | 1200/0075/15. | 0              |       |

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

| EROC          | DISTRICT NAME ST LOUIS | NAME              | DIVISION NAME     | - HON          | THS REPORTED  |       |
|---------------|------------------------|-------------------|-------------------|----------------|---------------|-------|
| B3 .          | ST LOUIS               | S<br>             | LOMER MISS VALLEY | 10/85          | 11/85         | 12/85 |
| RIVER         |                        | LEODE-LOCK NAME   |                   | LEN/HID/DRAFT  | (FT/FT/FT)    |       |
| KASKASKIA RIV | ER                     | 01-KASKASKIA RIV  | ER NAVAGATION LK  | 0610/0084/12.0 | 11 171 171 17 | •     |
| MISSISSIPPI R |                        | 24-LOCK & DAM 24  |                   | 0610/0110/12.0 |               |       |
|               |                        | 25-LOCK & DAM 25  |                   | 0610/0110/12.0 |               |       |
|               |                        | 26-LOCK & DAM 26  |                   | 0610/0110/12.0 |               |       |
|               |                        | 26-LOCK & DAM 26  | AUX 1             | 0380/0110/12.0 |               |       |
|               |                        | 27-CHAIN OF ROCKS | S LOCK & DAN 27   | 1210/0110/12.0 |               |       |
|               |                        | 27-CHAIN OF ROCKS | S LK & DH 27 AX1  | 0610/0110/12.0 |               |       |
|               |                        |                   |                   |                |               |       |

TABLE 2

| EROC<br>B3 | DISTRICT NAME<br>ST LOUIS |              |                 | SION NAMER MISS V |                |                |               | 10/8            |        | NTHS REF       |              | 12/85 |                    |
|------------|---------------------------|--------------|-----------------|-------------------|----------------|----------------|---------------|-----------------|--------|----------------|--------------|-------|--------------------|
| RIVER/LOC  | k name                    | TONS         | VESSL<br>RECRTN |                   | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>TOTAL | COMMER | RECRTN<br>(NAV | OTHER OPN, E | TOTAL | Tonnage<br>(Ktons) |
| !          | KASKASKIA RIVER           |              |                 |                   |                |                |               |                 |        |                |              |       |                    |
| Kaskaskia  | RIVER NAVAGATION L        | K xx         | ( <b>X</b>      |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND :  | STATISTICS                | 250          | 43              | 68                | 361            | 613            | 184           | 797             | 318    | 33             | 0            | 351   | 223                |
| DNBOUND S  | STATISTICS                | 231          | 43              | 111               | 385            | 173            | <b>60</b> 5   | 778             | 340    | 35             | 0            | 375   | 902                |
| TOTAL      |                           | 481          | 86              | 179               | 746            | 786            | 789           | 1575            | 658    | 68             | 0            | 726   | 1125               |
| i          | MISSISSIPPI RIVER         |              |                 |                   |                |                |               |                 |        |                |              |       |                    |
| LOCK & DAI | H 24                      | XI           | IX.             |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND !  | STATISTICS                | 284          | 31              | 60                | 375            | 1269           | 1413          | 2682            | 481    | 31             | 5            | 517   | 2089               |
| DNBOUND    | STATISTICS                | 344          | 74              | 26                | 444            | 339            | 3077          | 3416            | 556    | 84             | 12           | 652   | 4359               |
| TOTAL      |                           | 628          | 105             | 86                | 819            | 1608           | 4490          | 6098            | 1037   | 115            | 17           | 1169  | 6448               |
| LOCK & DAI | H 25                      | X X          | t <b>x</b>      |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND !  | STATISTICS                | 286          | 50              | 85                | 421            | 1287           | 1411          | 2698            | 502    | 37             | 14           | 553   | 2081               |
| DNBOUND    | STATISTICS                | 344          | 104             | 50                | 498            | 350            | 3105          | 3455            | 563    | 78             | 27           | 668   | 4397               |
| TOTAL      |                           | 630          | 154             | 135               | 919            | 1637           | 4516          | 6153            | 1065   | 115            | 41           | 1221  | 6479               |
| LOCK & DA  | H 26                      | *1           | <b>KX</b>       |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND    | STATISTICS                | 595          | 0               | 33                | 628            | 3682           | 3242          | 6924            | 1067   | 0              | 1            | 1068  | 4860               |
| DNBOUND !  | STATISTICS                | 671          | 0               | 16                | 687            | 616            | 7001          | 7617            | 1190   | 0              | 3            | 1193  | 9975               |
| TOTAL      |                           | 1266         | 0               | 49                | 1315           | 4298           | 10243         | 14541           | 2257   | 0              | 4            | 2261  | 14835              |
| LOCK & DA  | H 26 AUX 1                | X)           | <b>KX</b>       |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND    | STATISTICS                | 317          | 41              | 148               | 506            | 480            | 359           | 839             | 577    | 21             | 7            | 605   | 610                |
| DNBOUND    | STATISTICS                | 280          | 288             | 160               | 728            | 264            | 484           | 748             | 532    | 146            | 7            | 685   | 725                |
| TOTAL      |                           | 597          | 329             | 308               | 1234           | 744            | 843           | 1587            | 1109   | 167            | 14           | 1290  | 1335               |
| CHAIN OF   | ROCKS LOCK & DAM 27       | , <b>x</b> 1 | IX.             |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND    | STATISTICS                | 1151         | 15              | 214               | 1380           | 4956           | 3754          | 8710            | 1139   | 6              | 15           | 1160  | 5741               |
| DNBOUND !  | STATISTICS                | 1207         | 220             | 162               | 1589           | 1014           | 8409          | 9423            | 1201   | 75             | 16           | 1292  | 12322              |
| TOTAL      |                           | 2358         | 235             | 376               | 2969           | 5970           | 12163         | 18133           | 2340   | 81             | 31           | 2452  | 18663              |
| CHAIN OF   | ROCKS LK & DH 27 AX       | (1 ×         | K X             |                   |                |                |               |                 |        |                |              |       |                    |
| UPBOUND    | STATISTICS                | 0            | 0               | 0                 | 0              | 0              | 0             | 0               | 0      | 0              | 0            | 0     | 0                  |
|            | STATISTICS                | 0            | 4               | 0                 | 4              | 0              | 0             | 0               | 0      | 3              | 0            | 3     | 0                  |
| TOTAL      |                           | 0            | 4               | 0                 | 4              | 0              | 0             | 0               | 0      | 3              | 0            | 3     | 0                  |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR WATER RESOURCES

EROC DISTRICT NAME DIVISION NAME NONTHS REPORTED

B3 ST LOUIS LOWER MISS VALLEY 10/85 11/85 12/85

|        |                       |     |       |      |       |              |     |              |        |     |             |      |     | 11/0                  |                           | 12.                       |                        |
|--------|-----------------------|-----|-------|------|-------|--------------|-----|--------------|--------|-----|-------------|------|-----|-----------------------|---------------------------|---------------------------|------------------------|
|        |                       |     | APPRO | DACH |       | LOCK<br>ENTR |     | CESSINI<br>( | G TIME |     | <b>(.</b> ) | EXIT |     | ALL TIME DELAYED TONS | S EXPRES<br>DELAY<br>TIME | SED IN MI<br>DELAY<br>AVG | INUTES<br>Delay<br>Max |
|        |                       | HIN | AVG   | MAX  | : HIN | AVG          | MAX | : MIN        |        |     | : MIN       |      | MAX |                       | TONS                      | TONS                      | (ALL VSLS)             |
|        | KASKASKIA RIVER       |     |       |      |       |              |     |              |        |     |             |      |     |                       |                           |                           |                        |
| KASKAS | SKIA RIVER NAVAGATION | L 1 | 6     | 46   | 1     | 3            | 27  | 5            | 9      | 105 | 1           | 3    | 45  | 47                    | 931                       | 1.9                       | 140                    |
|        | MISSISSIPPI RIVER     |     |       |      |       |              |     |              |        |     |             |      |     |                       |                           |                           |                        |
| LOCK & | L DAN 24              | 1   | 10    | 126  | 1     | 9            | 139 | 4            | 9      | 127 | 1           | 16   | 84  | 382                   | 53436                     | 85.0                      | 940                    |
| LOCK & | DAM 25                | 1   | 9     | 103  | . 1   | 8            | 440 | 4            | 8      | 55  | 1           | 14   | 155 | 625                   | 42409                     | 67.3                      | 1179                   |
| LOCK & | DAM 26                | 1   | 7     | 680  | 1     | 10           | 438 | 4            | 11     | 190 | 1           | 13   | 422 | 1265                  | 554391                    | 437.9                     | 5189                   |
| LOCK & | DAM 26 AUX 1          | 1   | 6     | 121  | 1     | 5            | 51  | 4            | 11     | 70  | . 1         | 8    | 225 | 592                   | 79314                     | 132.8                     | 3416                   |
| CHÀIN  | OF ROCKS LOCK & DAM 2 | 7 1 | 8     | 411  | i     | 6            | 30  | 1            | 12     | 57  | 1           | 6    | 29  | 1897                  | 129544                    | 54.9                      | 578                    |
| CHAIN  | OF ROCKS LK & DH 27 A | ( 1 | 1     | 1    | 1     | 2            | 3   | 9            | 9      | 11  | 1           | 1    | 1   | 0                     | 0                         | 0.0                       | 0                      |

| EROC       | DISTRIC | STRICT NAME DIVISION NAME |                   | HON            | HONTHS REPORTED |       |  |  |  |
|------------|---------|---------------------------|-------------------|----------------|-----------------|-------|--|--|--|
| B4         | VICKSBU | ₹ <b>6</b>                | LOHER HISS VALLEY | 10/85          | 11/85           | 12/85 |  |  |  |
| RIVER      |         | LCODE-LOC                 | K nahe            | LEN/HID/DRAFT  | (FT/FT/FT)      |       |  |  |  |
| OUCHITA/BL | ACK RIV | 01-JONESV                 | ILLE LOCK & DAM   | 0600/0084/23.4 |                 |       |  |  |  |
|            |         | 02-COLUMB                 | IA LOCK & DAM     | 0600/0084/27.4 |                 |       |  |  |  |
|            |         | 03-FELSEN                 | THAL LOCK & DAN   | 0600/0084/11.0 |                 |       |  |  |  |
|            |         | 04-CALION                 | LOCK & DAM        | 0600/0084/11.0 |                 |       |  |  |  |
|            |         | 06-LDCK &                 | DAM 6             | 0268/0055/17.4 |                 |       |  |  |  |
|            |         | 08-LOCK &                 | DAM 8             | 0268/0055/19.0 |                 |       |  |  |  |
| RED RIVER  |         | 41-RED RI                 | JER LOCK & DAN #1 | 0685/0084/ 9.0 |                 |       |  |  |  |

| EROC DISTRICT NAME      |     | DIV             | ISION NAM      | Æ              |                |               | HONTHS REPORTED |        |        |                              |       |                    |  |
|-------------------------|-----|-----------------|----------------|----------------|----------------|---------------|-----------------|--------|--------|------------------------------|-------|--------------------|--|
| 84 VICKSBURG            |     | LOM             | ER MISS (      | VALLEY         |                |               | 10/8            | 35<br> | 11/8   | 35<br>                       | 12    | ?/85<br>           |  |
| RIVER/LOCK NAME         |     | VESSL<br>Recrtn | VESSL<br>OTHER | VESSL<br>Total | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>Total |        | RECRTN | LCKGES<br>OTHER<br>J. OPN, E | TOTAL | TONNAGE<br>(KTONS) |  |
| OUCHITA/BLACK RIV       |     |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| JONESVILLE LOCK & DAN   | XXX |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| UPBOUND STATISTICS      | 31  | 0               | 6              | 37             | 65             | 37            | 102             | 30     | 0      | 13                           | 43    | 68                 |  |
| DNBOUND STATISTICS      | 32  | 4               | 1              | 37             | 32             | 70            | 102             | 30     | 2      | 11                           | 43    | 99                 |  |
| TOTAL                   | 63  | 4               | 7              | 74             | 97             | 107           | 204             | 60     | 2      | 24                           | 86    | 168                |  |
| COLUMBIA LOCK & DAN     | XXX |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| UPBOUND STATISTICS      | 9   | 1               | 0              | 10             | 4              | 18            | 22              | 9      | 1      | 2                            | 12    | 24                 |  |
| DNBOUND STATISTICS      | 8   | 1               | 1              | 10             | 13             | 6             | 19              | 9      | 1      | 2                            | 12    | 8                  |  |
| TOTAL                   | 17  | 2               | 1              | 20             | 17             | 24            | 41              | 18     | 2      | 4                            | 24    | 33                 |  |
| FELSENTHAL LOCK & DAN   | XXX |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| UPBOUND STATISTICS      | 2   | 123             | 0              | 125            | 1              | 1             | 2               | 2      | 102    | 3                            | 107   | 0                  |  |
| DNBOUND STATISTICS      | 1   | 114             | 0              | 115            | 0              | 1             | 1               | 1      | 97     | 3                            | 101   | 1                  |  |
| TOTAL                   | 3   | 237             | 0              | 240            | 1              | 2             | 3               | 3      | 199    | 6                            | 208   | 1                  |  |
| CALION LOCK & DAM       | XXX |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| UPBOUND STATISTICS      | 13  | 28              | 5              | 46             | 1              | 15            | 16              | 16     | 21     | 2                            | 39    | 5                  |  |
| DNBOUND STATISTICS      | 14  | 33              | 3              | 50             | 10             | 7             | 17              | 17     | 27     | 2                            | 46    | 2                  |  |
| TOTAL                   | 27  | 61              | 8              | 96             | 11             | 22            | 33              | 33     | 48     | 4                            | 85    | 8                  |  |
| LOCK & DAN 6            | XXX | NO D            | ATA RECO       | RDED FOR       | THIS LO        | CK            |                 |        |        |                              |       |                    |  |
| LOCK & DAM 8            | XXX | NO C            | ATA RECO       | RDED FOR       | THIS LO        | CK            |                 |        |        |                              |       |                    |  |
| RED RIVER               |     |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| RED RIVER LOCK & DAM #1 | XXX |                 |                |                |                |               |                 |        |        |                              |       |                    |  |
| UPBOUND STATISTICS      | 60  | 3               | 12             | <i>7</i> 5     | 6              | 151           | 157             | 73     | 2      | 3                            | 78    | 185                |  |
| DNBOUND STATISTICS      | 41  | 3               | 26             | 70             | 132            | 7             | 139             | 69     | 2      | 3                            | 74    | 3                  |  |
| TOTAL                   | 101 | 6               | 38             | 145            | 138            | 158           | 296             | 142    | 4      | 6                            | 152   | 189                |  |
|                         |     |                 |                |                |                |               |                 |        |        |                              |       |                    |  |

| EROC B4    | DISTRICT NAME<br>VICKSBURG |     |              |             | VISION<br>HER HIS |        | LLEY  |    |        |    |   | 10/8 | 35 |                             | ONTHS REPORTED 11/85      |                                   | 12/85                                  |  |
|------------|----------------------------|-----|--------------|-------------|-------------------|--------|-------|----|--------|----|---|------|----|-----------------------------|---------------------------|-----------------------------------|--|--|
|            |                            | HIN | APPRI<br>AVG | Dach<br>Max |                   | ENTR'  | Y     |    | CHAMBE | R  |   | EXIT |    | ALL TIME<br>DELAYED<br>TOMS | S EXPRESS DELAY TIME TOWS | SED IN NI<br>DELAY<br>AVG<br>TONS | INUTES :<br>DELAY<br>MAX<br>(ALL VSLS) |  |
| (          | DUCHITA/BLACK RIV          |     |              |             |                   |        |       |    |        |    |   |      |    |                             |                           |                                   |  |  |
| JONESVILLE | E LOCK & DAM               | 1   | 7            | 25          | 1                 | 7      | 55    | 1  | 13     | 59 | 1 | 8    | 55 | 7                           | 86                        | 1.3                               | 40                                     |  |
| COLUMBIA ( | DCK & DAH                  | 3   | 6            | 10          | 5                 | 6      | 15    | 5  | 16     | 21 | 5 | 7    | 20 | 1                           | 5                         | 0.2                               | 5                                      |  |
| Felsenthal | LOCK & DAN                 | 1   | 2            | 12          | 1                 | 1      | 9     | 5  | 7      | 16 | 1 | 1    | 6  | 3                           | 15                        | 5.0                               | 12                                     |  |
| CALION LOC | CK & DAN                   | 1   | 3            | 16          | 1                 | 2      | 8     | 5  | 9      | 43 | 1 | 2    | 10 | 27                          | 91                        | 3.3                               | 20                                     |  |
| LOCK & DAY | 1 6                        | NO  | DATA         | RECORE      | DED FOR           | R THIS | 5 LOC | :K |        |    |   |      | -  |                             |                           |                                   |  |  |
| LOCK & DAR | 1 8                        | NO  | DATA         | RECORE      | DED FOR           | THIS   | LOC   | K  |        |    |   |      |    |                             |                           |                                   |  |  |
| ł          | RED RIVER                  |     |              |             |                   |        |       |    |        |    |   |      |    |                             |                           |                                   |  |  |
| RED RIVER  | LOCK & DAY #1              | 1   | 5            | 28          | 2                 | 5      | 20    | 3  | 10     | 45 | 1 | 5    | 15 | 100                         | 972                       | 9.6                               | 49                                     |  |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

DIVISION NAME **HONTHS REPORTED EROC** DISTRICT NAME DIVISION OFFICE, NED NEW ENGLAND 10/85 11/85. 12/85 LEN/WID/DRAFT (FT/FT/FT) LCODE-LOCK NAME CHARLES RIVER 01-CHARLES RIVER LOCKS & DAM 0000/0000/55.0 01-CHARLES RIVER L&D AUX 1 0000/0000/55.0

0000/0000/55.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

01-CHARLES RIVER L&D AUX 2

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PAGE A

TABLE 1

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC

DISTRICT NAME

DIVISION NAME

**HONTHS REPORTED** 

12/85

E3

NEH YORK

NORTH ATLANTIC

10/85

11/85

RIVER

LCODE-LOCK NAME

LEN/NID/DRAFT (FT/FT/FT) 0493/0044/15.0

HUDSON RIVER

01-TROY LOCK & DAM

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

12/85

TABLE 1

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED
E4 NORFOLK NORTH ATLANTIC 10/85 11/85

RIVER LCODE-LOCK NAME LEN/KID/DRAFT (FT/FT/FT)
ATLANT INTRCOASTAL 11-GREAT BRIDGE GUARD LOCK 0530/0072/12.0
DISHAL SHAMP 01-DEEP CREEK LOCK 0300/0052/ 6.0

02-SOUTH HILLS LOCK 0300/0052/ 6.0

| EROC<br>E4 | DISTRICT NAME<br>NORFOLK |            | NORT            | SION NAM       | TIC            |                |               | 10/8            | 35               | ONTHS REPORTED<br>11/85 |     | 12/85                   |                    |
|------------|--------------------------|------------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|-------------------------|-----|-------------------------|--------------------|
| RIVER/LOC  | k name                   | TOKS       | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>FULL | BARGES<br>TOTAL | LCKGES<br>Conher | RECRIN                  |     | LCKGES<br>Total<br>ETC) | Tonnage<br>(Ktons) |
|            | ATLANT INTRODASTAL       |            |                 |                |                |                |               |                 |                  |                         |     |                         |                    |
|            | DGE GUARD LOCK           | <b>X</b> 1 |                 |                |                |                |               |                 |                  |                         |     |                         |                    |
|            | STATISTICS               | 154        | 264             | 77             | 495            | 91             | 103           | 194             | 209              | 167                     | 56  | 432                     | 94                 |
|            | STATISTICS               | 147        | 2861            | 76             | 3084           | 91             | 87            | 178             | 205              | 692                     | 57  | 954                     | 83                 |
| TOTAL      |                          | 301        | 3125            | 153            | 3579           | 182            | 190           | 372             | 414              | 859                     | 113 | 1386                    | 177                |
|            | DISHAL SHAMP             |            |                 |                |                |                |               |                 |                  |                         |     |                         |                    |
| DEEP CREE  | K LOCK                   | *1         | IX              |                |                |                |               |                 |                  |                         |     |                         |                    |
| UPBOUND    | STATISTICS               | 1          | 15              | 0              | 16             | 1              | 0             | 1               | 1                | 10                      | 1   | 12                      | 0                  |
| DNBOUND    | STATISTICS               | 0          | 159             | 2              | 161            | 0              | 0             | 0               | 1                | 86                      | 2   | 89                      | 0                  |
| TOTAL      |                          | 1          | 174             | 2              | 177            | 1              | 0             | 1               | 2                | 96                      | 3   | 101                     | 0                  |
| SOUTH HIL  | LS LOCK                  | XI         | IX              |                |                |                |               |                 |                  |                         |     |                         |                    |
| UPBOUND    | STATISTICS               | 1          | 8               | 0              | 9              | 1              | 0             | 1               | 1                | 7                       | 1   | 9                       | 0                  |
| DNBOUND    | STATISTICS               | 0          | 156             | 1              | 157            | 0              | 0             | 0               | 1                | 76                      | 1   | 78                      | Ō                  |
| TOTAL,     |                          | 1          | 164             | 1              | 166            | 1              | 0             | 1               | 2                | 83                      | 2   | 87                      | 0                  |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

DIVISION NAME NONTHS REPORTED **EROC** DISTRICT NAME 10/85 12/85 NORFOLK NORTH ATLANTIC 11/85 E4 ALL TIMES EXPRESSED IN MINUTES LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY DELAY APPROACH ENTRY CHAMBER EXIT : TOMS TIME AVG MAX MIN AUG MAX : MIN AUG MAX : MIN AUG MAX : MIN AUG MAX : TONS TOMS (ALL VSLS) ATLANT INTRCOASTAL GREAT BRIDGE GUARD LOCK 1 3 20 1281 4.2 42 DISMAL SHAMP DEEP CREEK LOCK 10 1 5.0 75 SOUTH MILLS LOCK 3 12 5 15

PAGE A 13

TABLE 1

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC F1 DISTRICT NAME BUFFALO DIVISION NAME NORTH CENTRAL

10/85

**HONTHS REPORTED** 

11/85

12/85

RIVER

LCODE-LOCK NAME

BLK ROCK CH/TONAHANDA 01-BLACK ROCK LOCK

LEN/WID/DRAFT (FT/FT/FT)

0650/0070/21.6

| EROC DISTRICT NAME<br>F1 BUFFALO |                  |      |                 | SION NAM<br>H CENTRA | _              | ، عند عليه إنه الله الله الله الله الله الله الله ال |               | 10/6            |                  | NTHS REF                 |                 | 12                     | 2/85               |
|----------------------------------|------------------|------|-----------------|----------------------|----------------|--|---------------|-----------------|------------------|--------------------------|-----------------|------------------------|--------------------|
| RIVER/LOCK NAM                   | <b>KE</b>        | TOHS | VESSL<br>RECRTN | VESSL<br>OTHER       | VESSL<br>TOTAL | BARGS<br>EMPTY                                       | BARGS<br>FULL | BARGES<br>TOTAL | LCKGES<br>Conner | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER | LCKGES<br>TOTAL<br>TC) | TONNAGE<br>(KTONS) |
| BLK I                            | rock CH/Tonahand | A    |                 |                      |                |  |               |                 |                  |                          |                 |                        |                    |
| BLACK ROCK LOC                   | CK               | XX   |                 |                      |                |  |               |                 |                  |                          |                 |                        |                    |
| UPBOUND STAT                     | ISTICS           | 30   | 246             | 8                    | 284            | 24   | 6             | 30              | 38               | 107                      | 11              | 156                    | 56                 |
| DNBOUND STATE                    | ISTICS           | 33   | 451             | 1                    | 485            | 8  | 28            | 36              | 36               | 184                      | 11              | 231                    | 168                |
| TOTAL                            |                  | 63   | 697             | 9                    | 769            | 32   | 34            | 66              | 74               | 291                      | 22              | 387                    | 224                |

| EROC<br>F1 | DISTRICT NAME<br>BUFFALO |     |              |   | VISION<br>RTH CE |                     |    |       |    |      |                  | <br>10, | '85<br> | ì | MONTHS REPO                  |                                  | 12/                               | /85<br>                               |
|------------|--------------------------|-----|--------------|---|------------------|---------------------|----|-------|----|------|------------------|---------|---------|---|------------------------------|----------------------------------|-----------------------------------|---------------------------------------|
| 3****      |                          | MIN | appro<br>avg |   | : HIN            | LOCI<br>ENTF<br>AVG | RY | CESSI | CH | AMBE | (HIN<br>R<br>HAX | EXII    | Hax     | : | ALL TIMES<br>DELAYED<br>TOMS | EXPRESS<br>DELAY<br>TIME<br>TOWS | SED IN MI<br>DELAY<br>AVG<br>TOWS | NUTES .<br>DELAY<br>HAX<br>(ALL VSLS) |
| RI ACK ROO | BLK ROCK CH/TONAHA       | MDA |              | 2 |                  |                     | 2  |       | Я  | **   | 19               |         | _       |   | 20                           | 29                               | 0.4                               | 15                                    |

PAGE A 16

TABLE 1

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

**EROC** 

DISTRICT NAME CHICAGO DIVISION NAME NORTH CENTRAL

HONTHS REPORTED

10/85

11/85

12/85

RIVER

CHICAGO HARBOR

LCODE-LOCK NAME

LEN/WID/DRAFT (FT/FT/FT)

01-CHICAGO LOCK

0600/0080/21.5

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

| EROC         | DISTRICT NAME  | DIVISION NAME             | HO             | NTHS REPORTED |       |
|--------------|----------------|---------------------------|----------------|---------------|-------|
| F3           | DETROIT        | NORTH CENTRAL             | 10/85          | 11/85         | 12/85 |
| RIVER        | LCODE-L        | TOK NAME                  | LEN/HID/DRAFT  | (FT/FT/FT)    |       |
| FOX RIVER    |                | ERE LOCK & DAN            | 0146/0036/ 6.0 |               |       |
| LOY KTACK    |                | LE KAUKAUNA LOCK & DAM    | 0146/0036/ 6.0 |               |       |
|              |                | DE CROCHE LOCK & DAN      | 0146/0036/ 6.0 |               |       |
|              |                | AUNA LOCK 1               | 0144/0035/ 6.0 |               |       |
|              |                | AUNA LOCK 2               | 0144/0035/ 6.0 |               |       |
|              |                | HUNA LOCK 3               | 0144/0031/ 6.0 |               |       |
|              |                | AUNA LOCK 4               | 0144/0037/ 6.0 |               |       |
|              |                | AUNA LOCK 5               | 0144/0036/ 6.0 |               |       |
|              |                | LE CHUTE LOCK 2           | 0147/0035/ 6.0 |               |       |
|              |                | E CHUTE COMB LOCKS UPPER  | 0144/0036/ 6.0 |               |       |
|              | 34-LITTI       | LE CHUTE COMB LOCKS LONER | 0147/0035/ 6.0 |               |       |
|              |                | RS LOCK & DAM             | 0144/0035/ 6.0 |               |       |
|              | 41-APPLI       | ETON LOCK 1               | 0145/0034/ 6.0 |               |       |
|              | 42-APPLI       | ETON LOCK 2               | 0145/0035/ 6.0 |               |       |
|              | 43-APPLI       | ETON LOCK 3               | 0144/0035/ 6.0 |               |       |
|              |                | ETON LOCK 4               | 0144/0035/ 6.0 |               |       |
|              | 51-HENA        | SHA LOCK & DAN            | 0144/0034/ 6.0 |               |       |
| THE INLAND R | ROUTE 61-ALANS | SON LOCK                  | 0066/0018/ 7.0 |               |       |
| ST HARYS RIV |                | RTHUR LOCK                | 0800/0080/31.0 |               |       |
|              | 02-NEW F       | POE LOCK                  | 1200/0110/32.0 |               |       |
|              | 03-DAVIS       | S LOCKOO                  | 1350/0080/23.0 |               |       |
|              | 04-SABIN       | I LOCKOO                  | 1350/0080/23.0 |               |       |

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

| EROC DIST         | DISTRICT NAME DIVISION NAME ROCK ISLAND NORTH CENTRAL |                    | H  | ONTHS REPORTED |       |  |  |  |  |
|-------------------|---|--------------------|--|----------------|-------|--|--|--|--|
| F4 ROCK           | ISLAND  | NORTH CENTRAL      | 10/85<br>  | 11/ <b>8</b> 5 | 12/85 |  |  |  |  |
| RIVER             | LCODE-LOCK  | NAME               | LEN/WID/DRAF   | T (FT/FT/FT)   |       |  |  |  |  |
| ILLINOIS          | 01-THOMAS   | J O'BRIEN          | 1000/0110/12.  | 0              |       |  |  |  |  |
|                   | 02-LOCKPOR <sup>1</sup>                               | r lock             | 0600/0110/12.0<br>0600/0110/12.0<br>0600/0110/12.0<br>0600/0110/12.0<br>0600/0110/12.0 |                |       |  |  |  |  |
|                   | 03-Brandon  | ROAD LOCK & DAM    |  |                |       |  |  |  |  |
|                   | 04-Dresden  | ISLAND LOCK & DAH  |  |                |       |  |  |  |  |
|                   | 05-MARSIELI   | LES LOCK & DAN     |  |                |       |  |  |  |  |
|                   | 06-STARVED  | ROCK LOCK & DAM    |  |                |       |  |  |  |  |
|                   | 07-PEORIA (   | LOCK & DAM         |  |                |       |  |  |  |  |
|                   | 08-LAGRANG  | E LOCK & DAN       | 0600/0110/12.  | 0              |       |  |  |  |  |
| MISSISSIPPI RIVER | 11-LOCK & !   | DAN 11             | 0600/0110/10+  | 0              |       |  |  |  |  |
|                   | 12-LOCK & (   | DAM 12             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 13-LOCK & 1   | DAN 13             | 0600/0110/10+  | 0              |       |  |  |  |  |
|                   | 14-LOCK & (   | DAN 14             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 14-LOCK & (   | DAM 14 AUXILIARY 1 | 0320/0080/10   | 0              |       |  |  |  |  |
|                   | 15-LOCK & (   | DAN 15             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 15-LOCK & I   | DAM 15 AUXILIARY 1 | 0360/0110/10.  | 0              |       |  |  |  |  |
|                   | 16-LOCK & E   | DAN 16             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 17-LOCK & (   | OAN 17             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 18-LOCK & (   | DAN 18             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 19-LOCK & [   | AN 19              | 1200/0110/10.0   | 0              |       |  |  |  |  |
|                   | 19-LOCK & I   | DAM 19 AUXILIARY 1 | 1350/0110/10.  | 0              |       |  |  |  |  |
|                   | 20-LOCK & (   | DAM 20             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 21-LOCK & (   | DAM 21             | 0600/0110/10.  | 0              |       |  |  |  |  |
|                   | 22-LOCK & (   | DAN 22             | 0600/0110/10+  | 0              |       |  |  |  |  |

TABLE 2

| EROC DISTRICT NAME<br>F4 ROCK ISLAND |      | NORT            | ISION NAM |                |                |               | 10/8            |      | NTHS REP                 |     | 12    | 2/85               |
|--------------------------------------|------|-----------------|-----------|----------------|----------------|---------------|-----------------|------|--------------------------|-----|-------|--------------------|
| RIVER/LOCK NAME                      | TONS | VESSL<br>Recrtn |           | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>FULL | BARGES<br>TOTAL |      | LCKGES<br>RECRTN<br>(NAV |     | TOTAL | Tonnage<br>(Ktons) |
| ILLINOIS                             |      |                 |           |                |                |               |                 |      |                          |     |       |                    |
| THOMAS J O'BRIEN                     | X:   | X X             |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 307  | 145             | 72        | 524            | 281            | 599           | 880             | 368  | 96                       | 3   | 467   | 875                |
| DNBOUND STATISTICS                   | 326  | 831             | 65        | 1222           | 387            | 561           | 948             | 382  | 303                      | 2   | 687   | 863                |
| TOTAL                                | 633  | 976             | 137       | 1746           | 866            | 1160          | 1828            | 750  | 399                      | 5   | 1154  | 1739               |
| LOCKPORT LOCK                        | X    | <b>EX</b>       |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 527  | 11              | 86        | 62 <b>4</b>    | 368            | 2128          | 2496            | 567  | 5                        | 3   | 575   | 3198               |
| DNBOUND STATISTICS                   | 537  | 158             | 86        | 781            | 1623           | 902           | 2525            | 582  | 51                       | 2   | 635   | 1351               |
| TOTAL                                | 1064 | 169             | 172       | 1405           | 1991           | 3030          | 5021            | 1149 | 56                       | 5   | 1210  | 4549               |
| BRANDON ROAD LOCK & DAN              | X.   | EX              |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 532  | 14              | 93        | 639            | 408            | 2161          | 2569            | 588  | 8                        | 2   | 598   | 3253               |
| DNBOUND STATISTICS                   | 520  | 142             | 97        | <b>759</b>     | 1606           | 949           | 2555            | 586  | 59                       | 2   | 647   | 1445               |
| TOTAL                                | 1052 | 156             | 190       | 1398           | 2014           | 3110          | 5124            | 1174 | 67                       | 4   | 1245  | 4699               |
| DRESDEN ISLAND LOCK & DAM            | X:   | EX              |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 441  | 77              | 56        | 574            | 474            | 2219          | 2693            | 582  | 46                       | 6   | 634   | 3402               |
| DNBOUND STATISTICS                   | 453  | 166             | 41        | 660            | 1568           | 1102          | 2670            | 572  | 97                       | 5   | 674   | 1777               |
| TOTAL                                | 894  | 243             | 97        | 1234           | 2042           | 3321          | 5363            | 1154 | 143                      | 11  | 1308  | 5180               |
| MARSIELLES LOCK & DAM                | X1   |                 |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 450  | 58              | 47        | 555            | 616            | 2151          | 2767            | 635  | 38                       | 13  | 686   | 3397               |
| DNEOUND STATISTICS                   | 451  | 136             | 43        | 630            | 1364           | 1333          | 2697            | 609  | 95                       | 12  | 716   | 2112               |
| TOTAL                                | 901  | 194             | 90        | 1185           | 1980           | 3484          | 5464            | 1244 | 133                      | 25  | 1402  | 5509               |
| STARVED ROCK LOCK & DAM              | x:   |                 |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 451  |                 | 38        | 541            | 847            | 2174          | 3021            |      | 32                       | 34  | 708   | 3443               |
| DNBOUND STATISTICS                   | 438  | 141             | 39        | 618            | 1316           | 1597          | 2913            | 612  | 101                      | 26  | 739   | 2436               |
| TOTAL                                | 889  | 193             | 77        | 1159           | 2163           | 3771          | 5934            | 1254 | 133                      | 60  | 1447  | 5930               |
| PEORIA LOCK & DAM                    | X    |                 |           |                |                |               |                 |      |                          |     |       |                    |
| UPEOUND STATISTICS                   | 490  | 18              | 53        | 561            | 1490           | 2584          | 4074            | 210  | 12                       | 414 | 636   | 4035               |
| DNBOUND STATISTICS                   | 506  | 109             | 27        | 642            | 1402           | 2519          | 3921            | 225  | 62                       | 391 | 678   | 3732               |
| TOTAL                                | 996  | 127             | 80        | 1203           | 2892           | 5103          | 7995            | 435  | 74                       | 805 | 1314  | 7767               |
| LAGRANGE LOCK & DAM                  | X    |                 |           |                |                |               |                 |      |                          |     |       |                    |
| UPBOUND STATISTICS                   | 459  | 8               | 24        | 491            | 2188           | 2144          | 4332            | 208  | 4                        | 366 | 578   | 3428               |
| DABOUND STATISTICS                   | 468  | 135             | 6         | 609            | 742            | 3 <b>48</b> 8 | 4230            | 201  | 72                       | 369 | 642   | 5076               |
| TOTAL                                | 927  | 143             | 30        | 1100           | 2 <b>930</b>   | 5632          | 8562            | 409  | 76                       | 735 | 1220  | 8504               |

TABLE 2

| EROC<br>F4 |                   |            |            | ISION NAME<br>TH CENTRAL |                |                | 10/8          |              | NTHS REP           |                | 12      | 12/85      |                    |
|------------|-------------------|------------|------------|--------------------------|----------------|----------------|---------------|--------------|--------------------|----------------|---------|------------|--------------------|
| RIVER/LOG  | CK NAME           | TOHS       |            | VESSL<br>OTHER           | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full |              | LCKGES<br>Commer   | RECRTN         |         | TOTAL      | Tonnage<br>(Ktons) |
|            | MISSISSIPPI RIVER |            |            |                          |                |                |               |              |                    |                |         |            |                    |
| LOCK & DA  | AH 11             | XX         | ¥          |                          |                |                |               |              |                    |                |         |            |                    |
|            |                   | 141        | 94         | 72                       | 307            | 491            | 787           | 1278         | 288                | 77             | 6       | 371        | 1158               |
|            | STATISTICS        | 184        | 126        | 44                       | 354            | 178            | 1603          | 1781         | 301                | 104            | 7       | 412        | 2311               |
| TOTAL      |                   | 325        | 220        | 116                      | 661            | 669            | 2390          | 3059         | 589                | 181            | 13      | 783        | 3469               |
| LOCK & DA  | ΔM 12             | XX         | r          |                          |                |                |               |              |                    |                |         |            |                    |
|            | STATISTICS        |            | -<br>96    | 39                       | 278            | 498            | 885           | 1383         | 252                | 83             | 7       | 342        | 1285               |
|            | STATISTICS        | 185        | 122        | 8                        | 315            | 208            | 1681          | 1889         | 289                | 115            | 8       | 412        | 2385               |
| TOTAL      |                   | 328        | 218        | 47                       | 593            | 706            | 2566          | 3272         | 541                | 198            | 15      | 754        | 3670               |
|            |                   |            | _          |                          |                |                |               |              |                    |                |         |            |                    |
| LOCK & DA  |                   | **         |            | 40                       | 225            | 400            | 000           | 4004         | 257                | 70             | 7       | 227        | 1202               |
|            | STATISTICS        | 144        | 149        | 42                       | 335            | 498            | 883           | 1381         | 257                | 73             | 7       | 337        | 1283               |
|            | STATISTICS        | 186<br>330 | 185<br>334 | 9<br>51                  | 380<br>715     | 207            | 1673<br>2556  | 1880<br>3261 | 294<br>551         | 101<br>174     | 8<br>15 | 403<br>740 | 2363<br>3646       |
| TOTAL      |                   | 330        | 334        | 21                       | /15            | 705            | 2006          | 3201         | 331                | 1/4            | 13      | /40        | 3040               |
| LOCK & DA  | AH 14             | XX         | ľ          |                          |                |                |               |              |                    |                |         |            |                    |
| UPBOUND    | STATISTICS        | 216        | 120        | 40                       | 376            | 726            | 1063          | 1789         | 344                | 74             | 8       | 426        | 1544               |
| DNBOUND    | STATISTICS        | 255        | 143        | 18                       | 416            | 224            | 2073          | 2297         | 402                | 88             | 5       | 495        | 2859               |
| TOTAL      |                   | 471        | 263        | 58                       | 792            | 950            | 3136          | 4086         | 746                | 162            | 13      | 921        | 4404               |
| LOCK & DA  | AM 14 AUXILIARY 1 | XX         | x NO (     | DATA RECOR               | DED FOR        | THIS LO        | OCK           |              |                    |                |         |            |                    |
| LOCK & DA  | AN 15             | XX         | r          |                          |                |                |               |              |                    |                | •       |            |                    |
|            |                   | 215        | -<br>6     | 49                       | 270            | 637            | 1134          | 1771         | 369                | 5              | 11      | 385        | 1655               |
|            | STATISTICS        | 258        | 17         |                          | 306            | 278            | 2009          | 2287         | 437                | 22             | 7       | 466        | 2833               |
| TOTAL      |                   | 473        | 23         | 80                       | 576            | 915            | 3143          | 4058         | 806                | 27             | 18      | 851        | 4488               |
| LOCK & DA  | AH 15 AUXILIARY 1 | XXI        | - OMI V    | FIRST AND                | CECONO         | MONTUC         | DEDOGTEN      |              |                    |                |         |            |                    |
|            | STATISTICS        | 34         | 97         | 28                       | 159            | 17             | 27            | 44           | 61                 | 61             | 0       | 122        | 46                 |
|            | STATISTICS        | 30         | 151        | 20                       | 201            | 43             | 4             | 47           | 49                 | 96             | 1       | 146        | 5                  |
| TOTAL      | 0191101100        | 54         | 248        | 48                       | 360            | 60             | 31            | 91           | 110                | 157            | 1       | 268        | 52                 |
| TOTAL      |                   | U-1        | 240        | 10                       | 550            | 00             | 31            | /1           | 110                | 10,            | •       | 200        | JL .               |
| LOCK & DA  |                   | XXI        |            |                          |                |                |               |              |                    |                |         |            |                    |
|            | STATISTICS        | 230        | 32         | 77                       | 339            | 701            | 1223          | 1924         | 400                | 35             | 15      | 450        | 1824               |
|            | STATISTICS        | 290        | 65         | 29                       | 384            | 339            | 2135          | 2474         | 445                | 73             | 14      | 532        | 2998               |
| TOTAL      |                   | 520        | 97         | 106                      | 723            | 1040           | 3358          | 4398         | 845                | 108            | 29      | 982        | 4823               |
| LOCK & DA  | AM 17             | XXI        | <b>T</b>   |                          |                |                |               |              |                    |                |         |            |                    |
|            | STATISTICS        | 212        | 19         | 39                       | 270            | 721            | 1303          | 2024         | 361                | 24             | 12      | 397        | 1928               |
| DNEQUND    | STATISTICS        | 254        | 54         | 12                       | 320            | 381            | 2 ₄89         | 2570         | 411                | 71             | 14      | 496        | 3080               |
| TOTAL.     |                   | 466        | 73         | 51                       | 590            | 1102           | 5492          | 4594         | 772                | <del>9</del> 5 | 26      | 893        | 5009               |
|            |                   |            |            |                          |                |                |               |              | · · · <del>-</del> |                |         |            |                    |

TABLE 2

Separation of the property of

| EROC<br>F4 | DISTRICT NAME<br>ROCK ISLAND |      | DIVISION NAME NORTH CENTRAL |                |                |                |               |                 | HC<br>15         | NTHS REF |    | 12    | 2/85               |
|------------|------------------------------|------|-----------------------------|----------------|----------------|----------------|---------------|-----------------|------------------|----------|----|-------|--------------------|
| RIVER/LO   | CK NAME                      | TONS | VESSL<br>RECRTN             | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>ENPTY | BARGS<br>Full | BARGES<br>Total | LCKGES<br>COMMER |          |    | TOTAL | Tonnage<br>(KTONS) |
|            | HISSISSIPPI RIVER            |      |                             |                |                |                |               |                 |                  |          |    |       |                    |
| LOCK & D   | AM 18                        | XX   | x                           |                |                |                |               |                 |                  |          |    |       |                    |
|            | STATISTICS                   | 209  | 40                          | 56             | 305            | 728            | 1243          | 1971            | 371              | 50       | 10 | 431   | 1851               |
| DNBOUND    | STATISTICS                   | 267  | 74                          | 16             | 357            | 373            | 2275          | 2648            | 433              | 96       | 12 | 541   | 3204               |
| TOTAL      |                              | 476  | 114                         | 72             | 662            | 1101           | 3518          | 4619            | 804              | 146      | 22 | 972   | 5055               |
| LOCK & D   | AM 19 '                      | XX   | x                           |                |                |                |               |                 |                  |          |    |       |                    |
|            | STATISTICS                   | 210  | 13                          | 56             | 279            | 779            | 1311          | 2090            | 245              | 9        | 6  | 260   | 1944               |
| DNBOUND    | STATISTICS                   | 269  | 60                          | 20             | 349            | 345            | 2451          | 2796            | 285              | 38       | 8  | 331   | 3440               |
| TOTAL      |                              | 479  | 73                          | 76             | 628            | 1124           | 3762          | 4886            | 530              | 47       | 14 | 591   | 5384               |
| LOCK & D   | AH 19 AUXILIARY 1            | II   | × 100                       | ATA RECO       | IRDED FOR      | THIS LO        | CK            |                 |                  |          |    |       |                    |
| LOCK & D   | AH 20                        | XX   | I                           |                |                |                |               |                 |                  |          |    |       |                    |
|            | STATISTICS                   | 225  | 11                          | 124            | 360            | 871            | 1323          | 2194            | 455              | 10       | 13 | 478   | 1958               |
| DNBOUND    | STATISTICS                   | 286  | 63                          | 80             | 429            | 325            | 2559          | 2884            | 517              | 56       | 18 | 591   | 3577               |
| TOTAL      |                              | 511  | 74                          | 204            | 789            | 1196           | 3882          | 5078            | 972              | 66       | 31 | 1069  | 5536               |
| LOCK & D   | A <del>H</del> 21            | XX   | x                           |                |                |                |               |                 |                  |          |    |       |                    |
|            | STATISTICS                   | 248  | 23                          | 70             | 341            | 1066           | 1352          | 2418            | 451              | 22       | 6  | 479   | 1998               |
| DNBOUND    | STATISTICS                   | 312  | 67                          | 31             | 410            | 346            | 2758          | 3104            | 532              | 67       | 10 | 609   | 3868               |
| TOTAL      |                              | 560  | 90                          | 101            | 751            | 1412           | 4110          | 5522            | 983              | 89       | 16 | 1088  | 5867               |
| LOCK & D   | AH 22                        | XX   | 1                           |                |                |                |               |                 |                  |          |    |       |                    |
|            | STATISTICS                   | 258  | 32                          | 54             | 344            | 1123           | 1373          | 2496            | 449              | 23       | 6  | 478   | 2035               |
|            | STATISTICS                   | 319  | 101                         | 18             | 438            | 297            | 2896          | 3193            | 527              | 78       | 7  | 612   | 4100               |
| TOTAL      |                              | 577  | 133                         | 72             | 782            | 1420           | 4269          | 5689            | 976              | 101      | 13 | 1090  | 6135               |
|            |                              |      |                             |                |                |                |               |                 |                  |          |    |       |                    |

| EROC DISTRICT NAME<br>F4 ROCK ISLAND |     |       |        | ISION<br>TH CE |       |         |   |      |     |   | 10/8 | 35         | HONTHS REPO            |                            | 12/                       | 85<br>          |
|--------------------------------------|-----|-------|--------|----------------|-------|---------|---|------|-----|---|------|------------|------------------------|----------------------------|---------------------------|-----------------|
|                                      |     | APPRO | Dach   |                | LOCK  | ( PROCI |   | TIME |     |   | EXIT |            | ALL TIMES DELAYED TOHS | S EXPRESS<br>DELAY<br>TIME | SED IN HI<br>DELAY<br>AUG | NUTES DELAY MAX |
|                                      | HIN |       | MAX :  | HIN            |       |         |   |      | MAX |   |      | MAX        |                        | TOWS                       | TONS                      | (ALL VSLS)      |
| ILLINOIS                             |     |       |        |                |       |         |   |      |     |   |      |            |                        |                            |                           |                 |
| THOMAS J O'BRIEN                     | 1   | 5     | 66     | 1              | 2     | 36      | 3 | 15   | 76  | 1 | 2    | 35         | 107                    | 1856                       | 2.9                       | 301             |
| LOCKPORT LOCK                        | 1   | 9     | 68     | 1              | 13    | 48      | 3 | 30   | 131 | 1 | 10   | 116        | 894                    | 98259                      | 92.3                      | 1478            |
| Brandon Road Lock & Dah              | 1   | 11    | 53     | 1              | 10    | 95      | 5 | 21   | 82  | 1 | 12   | 400        | 773                    | 73841                      | 70.1                      | 1775            |
| DRESDEN ISLAND LOCK & DAN            | 1   | 9     | 71     | 1              | 9     | 82      | 5 | 16   | 392 | 1 | 12   | <i>7</i> 5 | 530                    | 52941                      | 59.2                      | 735             |
| HARSTELLES LOCK & DAN                | 1   | 10    | 384    | 1              | 9     | 391     | 3 | 19   | 396 | 1 | 15   | 134        | 648                    | 133162                     | 147.7                     | 1605            |
| STARVED ROCK LOCK & DAM              | 1   | 7     | 386    | 1              | 9     | 370     | 4 | 15   | 75  | 1 | 14   | 148        | 522                    | 85175                      | 95.8                      | 1640            |
| PEORTA LOCK & DAN                    | 1   | 4     | 64     | 1              | 5     | 35      | 1 | 5    | 30  | 1 | 9    | 309        | 324                    | 31577                      | 31.7                      | 593             |
| LAGRANGE LOCK & DAM                  | 1   | 5     | 82     | 1              | 6     | 45      | 1 | 4    | 72  | 1 | 9    | 90         | 421                    | 30727                      | 33.1                      | 575             |
| MISSISSIPPI RIVER                    | t   |       |        |                |       |         |   |      |     |   |      |            |                        |                            |                           |                 |
| LOCK & DAM 11                        | 1   | 8     | 222    | 1              | 8     | 150     | 3 | 9    | 80  | 1 | 14   | 152        | 147                    | 15722                      | 48.3                      | 695             |
| LOCK & DAM 12                        | 1   | 10    | 382    | 1              | 8     | 105     | 1 | 6    | 439 | 1 | 13   | 89         | 135                    | 13725                      | 41.8                      | 570             |
| LOCK & DAM 13                        | 1   | 8     | 310    | 1              | 6     | 103     | 3 | 8    | 75  | 1 | 15   | 107        | 131                    | 17598                      | 53.3                      | 1645            |
| LOCK & DAM 14                        | 1   | 8     | 146    | 1              | 7     | 89      | 1 | 8    | 42  | 1 | 14   | 97         | 194                    | 18276                      | 38.8                      | 1440            |
| LOCK & DAH 14 AUXILIARY 1            | NO  | DATA  | RECORD | ED FO          | R THI | S LOCI  | ( |      |     |   |      |            |                        |                            |                           |                 |
| LOCK & DAM 15                        | 1   | 10    | 439    | 1              | 9     | 381     | 1 | 10   | 85  | 1 | 16   | 121        | 209                    | 21939                      | 46.3                      | 655             |

LDCK & DAM 21

LOCK & DAM 22

1 11 445

1 17 902

1 8 405

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR WATER RESOURCES

**EROC** DISTRICT NAME DIVISION NAME **HONTHS REPORTED** F4 ROCK ISLAND NORTH CENTRAL 10/85 11/85 12/85 ALL TIMES EXPRESSED IN HINUTES : DELAYED DELAY DELAY DELAY LOCK PROCESSING TIME (MIN.) ENTRY CHAMBER EXIT : TOWS APPROACH TIME AVG MAX HIN AUG HAX : HIN AUG HAX : HIN AUG HAX : HIN AUG HAX : TOHS TONS (ALL VSLS) MISSISSIPPI RIVER 6 92 1.4 1 2 30 1 2 13 3 10 57 1 2 18 30 LOCK & DAM 15 AUXILIARY 1 1 11 96 1 8 115 1 16 140 46993 90.3 2900 LOCK & DAM 16 1 8 105 269 64.6 LOCK & DAY 17 1 12 85 1 8 115 2 9 86 1 15 90 218 30124 1830 LOCK & DAM 18 1 11 195 1 10 200 1 7 128 1 15 394 238 27085 56.9 1340 1 19 748 1 10 89 202 109330 228.2 8390 LOCK & DAM 19 1 25 676 9 698 LOCK & DAM 19 AUXILIARY 1 NO DATA RECORDED FOR THIS LOCK 1 16 163 268 72445 141.7 3516 LOCK & DAM 20 1 8 482 1 8 90 1 7 125

1 6 36

1 10 564 1 7 387 1 21 405

1 17 437

275

370

27854 49.7

66521 115.2

1066

2314

| EROC       |         | H              | ONTHS REPORTED    |                |            |       |
|------------|---------|----------------|-------------------|----------------|------------|-------|
| F5         | ST PAUL |                | NORTH CENTRAL     | 10/85          | 11/85      | 12/85 |
| RIVER      |         | LCODE-LOCK NAM | Ē                 | LEN/WID/DRAF   | (FT/FT/FT) |       |
| MISSISSIPP | I RIVER | 01-LOCK & DAN  | 1 MAIN CHBR 1     | 0400/0056/11+  | 0          |       |
|            |         | 01-LOCK & DAM  | 1 MAIN CHBR 2     | 0400/0056/11.0 | )          |       |
|            |         | 02-LOCK & DAM  | 2                 | 0600/0110/11.  | 0          |       |
|            |         | 02-LOCK & DAN  | 2 AUXILIARY 1     | 0500/0110/11.  | )          |       |
|            |         | 03-LOCK & DAM  | 3                 | 0600/0110/11.  | 0          |       |
|            |         | 04-LOCK & DAM  | 4                 | 0600/0110/11.  | 0          |       |
|            |         | 05-LOCK & DAM  | 5                 | 0600/0110/11   | 0          |       |
|            |         | 06-LOCK & DAM  | 6                 | 0600/0110/11.  | )          |       |
|            |         | 07-LOCK & DAM  | 7                 | 0600/0110/11   | 0          |       |
|            |         | 08-LOCK & DAN  | 8                 | 0600/0110/11.  | )          |       |
|            |         | 09-LOCK & DAM  | 9                 | 0600/0110/11.  | 0          |       |
|            |         | 10-LOCK & DAM  | 10                | 0600/0110/11.  | )          |       |
| l          |         | 51-ST ANTHONY  | FALLS UPPER L & D | 0400/0056/11.  | )          |       |
| •          |         | 52-ST ANTHONY  | FALLS LONER L & D | 0400/0056/11.0 | )          |       |
|            |         | 55-LOCK & DAM  | 5A                | 0600/0110/11+  | 0          |       |

| F5        | DISTRICT NAME<br>ST PAUL |     | NOR    | ISION NAME<br>TH CENTRAL |                |         |          | 10/8  | 15     | NTHS REF       | 15    | 12            |                    |
|-----------|--------------------------|-----|--------|--------------------------|----------------|---------|----------|-------|--------|----------------|-------|---------------|--------------------|
| RIVER/LOG |                          |     | RECRTN | VESSL<br>OTHER           | VESSL<br>TOTAL | EMPTY   | FULL     | TOTAL | CONNER | recrtn<br>(Nav | OTHER | TOTAL<br>(TC) | Tonnage<br>(Ktons) |
|           | MISSISSIPPI RIVER        |     |        |                          |                |         |          |       |        |                |       |               |                    |
| LOCK & DA | AM 1 MAIN CHBR 1         | XXX | ONLY   | FIRST AND                | SECOND         | HONTHS  | REPORTED |       |        |                |       |               |                    |
|           |                          | 138 |        | 24                       | 279            | 87      | 152      | 239   | 156    | 66             | 7     | 229           | 209                |
|           | STATISTICS               |     |        | 10                       |                |         | 104      |       |        | 65             |       |               | 144                |
| TOTAL     |                          | 283 |        |                          |                |         | 256      | 492   | 309    | 131            |       | 456           | 354                |
| LOCK & DA | AH 1 MAIN CHBR 2         | IXX | NO I   | DATA RECOR               | DED FOR        | THIS LO | DCK      |       |        |                |       |               |                    |
| LOCK & DA | AM 2                     | XXX | ONLY   | FIRST AND                | SECONO         | MONTHS  | REPORTED |       |        |                |       |               |                    |
|           | STATISTICS               |     | 184    | 24                       |                | 867     | 508      | 1375  | 252    | 128            | 2     | 382           | 749                |
|           |                          | 202 | 153    | 4.                       |                | 79      |          | 1696  | 289    |                | 2     | 407           | 2361               |
| TOTAL     |                          | 382 | 337    | 28                       | 747            |         | 2125     | 3071  | 541    | 244            | 4     | 789           | 3111               |
| LOCK & DA | AM 2 AUXILIARY 1         | XXX | NO I   | DATA RECOR               | DED FOR        | THIS LO | OCK      |       |        |                |       |               |                    |
| LOCK & DA | AM 3                     | XXX | ONLY   | FIRST AND                | SECOND         | HONTHS  | REPORTED |       |        |                |       |               |                    |
|           | STATISTICS               | 135 | 226    | 29                       | 390            | 602     | 509      | 1111  | 202    | 157            | 10    | 369           | 747                |
|           | STATISTICS               | 157 | 283    | 8                        |                | 72      | 1379     | 1451  | 227    |                | 8     | 404           | 2036               |
| TOTAL     |                          | 292 | 509    | 37                       |                | 674     | 1888     | 2562  | 429    | 326            | 18    | 773           | 2783               |
| LOCK & DA | AM 4                     | *** |        |                          |                |         |          |       |        |                |       |               |                    |
|           |                          | 132 | 86     | 36                       | 254            | 627     | 517      | 1144  | 219    | 80             | 10    | 309           | <i>7</i> 58        |
|           |                          | 177 |        | 6                        | 293            | 57      | 1450     | 1507  | 258    | 93             | - 12  | 363           | 2132               |
| TOTAL     |                          | 309 | 196    | 42                       | 547            | 684     | 1967     | 2651  | 477    | 173            | 22    | 672           | 2870               |
| LOCK & DA | AN 5                     | IXI |        |                          |                |         |          |       |        |                |       |               |                    |
|           | STATISTICS               | 132 |        | 21                       | 211            | 596     | 523      | 1119  | 203    | 64             | 25    | 292           | 769                |
|           | STATISTICS               | 152 |        | 5                        |                |         | 1395     | 1452  | 229    | 80             | 30    | 339           | 2042               |
| TOTAL     |                          | 284 | 139    | 26                       | 449            | 653     | 1918     | 2571  | 432    | 144            | 55    | 631           | 2812               |
| LOCK & DA | A M.                     | XXX |        |                          |                |         |          |       |        |                |       |               |                    |
|           | STATISTICS               | 133 | 70     | 22                       | 225            | 641     | 605      | 1246  | 221    | 61             | 16    | 298           | 881                |
|           | STATISTICS               | 156 | 85     | 1                        | 242            | 68      | 1478     | 1546  | 240    | 86             | 14    | 340           | 2160               |
| TOTAL     |                          | 289 | 155    | 23                       | 467            | 709     | 2083     | 2792  | 461    | 147            | 30    | 638           | 3042               |
| LOCK & DA | M 7                      | XXX |        |                          |                |         |          |       |        |                |       |               |                    |
|           | STATISTICS               | 135 | 116    | 50                       | 301            | 643     | 618      | 1261  | 242    | 103            | 14    | 359           | 902                |
|           | STATISTICS               | 165 | 141    | 15                       | 321            | 75      | 1462     | 1537  | 245    | 120            | 13    | 378           | 2135               |
|           | MINITALTED               |     |        |                          |                |         |          |       |        |                |       |               | 3037               |
| TOTAL     |                          | 300 | 257    | 65                       | 622            | 718     | 2080     | 2798  | 487    | 223            | 27    | 737           | 3                  |

| EROC DISTRICT NAME           |      | DÍV1            | SION NAME      |                |                |               |                 | MO               | NTHS REP | ORTED      |       |                    |
|------------------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|----------|------------|-------|--------------------|
| F5 ST PAUL                   |      | NORT            | TH CENTRAL     |                |                |               | 10/8            | 5                | 11/8     | 35<br>     | 12    | /85<br>            |
| RIVER/LOCK NAME              | TONS | Vessl<br>Recrtn | VESSL<br>Other | vessl<br>Total | BARGS<br>Empty | BARGS<br>Full | BARGES<br>TOTAL | LCKGES<br>Commer |          |            | TOTAL | Tonnage<br>(Ktons) |
| MISSISSIPPI RIVER            |      |                 |                | ******         |                |               |                 |                  |          |            |       |                    |
|                              |      |                 |                |                |                |               |                 |                  |          |            |       |                    |
| LOCK & DAM 8                 | XXI  |                 |                |                |                | 470           | 4070            | 047              |          | 4.6        | 000   | 207                |
| UPBOUND STATISTICS           | 138  | 49              | 21             | 208            | 600            | 673           | 1273            | 217              | 62       | 10         | 289   | 987                |
| DNBOUND STATISTICS           | 156  | 71              | 2              | 229            | 104            | 1444          | 1548            | 233              | 90       | 13         | 336   | 2085               |
| TOTAL                        | 294  | 120             | 23             | 437            | 704            | 2117          | 2821            | 450              | 152      | 23         | 625   | 3073               |
| OCK & DAM 9                  | 221  | ľ               |                |                |                |               |                 |                  |          |            |       |                    |
| UPBOUND STATISTICS           | 134  | 77              | 21             | 232            | 469            | 735           | 1204            | 203              | 77       | 8          | 288   | 1082               |
| DNBOUND STATISTICS           | 161  | 96              | 1              | 258            | 161            | 1457          | 1618            | 241              | 109      | 10         | 360   | 2122               |
| TOTAL                        | 295  | 173             | 22             | 490            | 630            | 2192          | 2822            | 444              | 186      | 18         | 648   | 3205               |
|                              |      |                 |                |                |                |               |                 |                  |          |            |       |                    |
| DCK & DAM 10                 | 221  |                 |                |                |                |               |                 |                  |          |            |       |                    |
| UPBOUND STATISTICS           | 147  | 74              | 36             | 257            | 543            | <i>7</i> 58   | 1301            | 245              | 92       | 8          | 345   | 1109               |
| DIMBOUND STATISTICS          | 179  | 103             | 10             | 292            | 160            | 1593          | 1753            | 279              | 121      | 8          | 408   | 2309               |
| TOTAL                        | 326  | 177             | 46             | 549            | 703            | 2351          | 3054            | 524              | 213      | 16         | 753   | 3418               |
|                              |      |                 |                |                |                |               |                 |                  |          |            |       |                    |
| ST ANTHONY FALLS UPPER L & D |      |                 | FIRST AND      |                |                |               |                 | 445              |          | _          | 450   | 400                |
| UPBOUND STATISTICS           | 94   | 55              | 22             | 171            | 83             | 66            | 149             | 115              | 39       | 5          | 159   | 100                |
| DNBOUND STATISTICS           | 108  | 67              | 9              | 184            | 72             | 99            | 171             | 115              | 43       | 4          | 162   | 136                |
| TOTAL                        | 202  | 122             | 31             | 355            | 155            | 165           | 320             | 230              | 82       | 9          | 321   | 237                |
| ST ANTHONY FALLS LONER L & D | 111  | COMEY           | FIRST AND      | SECOND         | MONTHS         | REPORTED      |                 |                  |          |            |       |                    |
| UPBOUND STATISTICS           | 140  | 55              | 24             | 219            | 92             | 150           | 242             | 164              | 36       | 0          | 200   | 210                |
| DNBOUND STATISTICS           | 153  | 65              | 9              | 227            | 156            | 105           | 261             | 160              | 41       | 2          | 203   | 145                |
| TOTAL                        | 293  | 120             | 33             | 446            | 248            | 255           | 503             | 324              | 77       | 2          | 403   | 355                |
| · • · · · ·                  |      |                 | 30             |                |                |               |                 | •                | - •      | -          |       |                    |
| LOCK & DAM 5A                | **1  | ľ               |                |                |                |               |                 |                  |          |            |       |                    |
| UPBOUND STATISTICS           | 133  | 83              | 47             | 263            | 603            | 539           | 1142            | 229              | 85       | 24         | 338   | 787                |
| DMBOUND STATISTICS           | 155  | <del>9</del> 9  | 24             | 278            | 60             | 1381          | 1441            | 230              | 106      | <b>2</b> 2 | 358   | 2026               |
| TOTAL .                      | 288  | 182             | 71             | 541            | 663            | 1920          | 2583            | 459              | 191      | 46         | 696   | 2813               |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME HONTHS REPORTED

F5 ST PAUL NORTH CENTRAL 10/85 11/85 12/85

ALL TIMES EXPRESSED IN MINUTES LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY DELAY ENTRY CHAMBER : TONS AVG TIME MAX MIN AUG MAX : MIN AUG MAX : MIN AUG MAX : MIN AUG MAX : TOWS TOWS (ALL VSLS) MISSISSIPPI RIVER 21 71 LOCK & DAN 1 MAIN CHBR 1 1 3 75 1 5 17 7 12 52 1 4 27 518 1.8 NO DATA RECORDED FOR THIS LOCK LOCK & DAM 1 MAIN CHBR 2 LOCK & DAM 2 1 9 119 8 117 2 8 55 1 11 112 157 14319 37.4 735 1 LOCK & DAM 2 AUXILIARY 1 NO DATA RECORDED FOR THIS LOCK 6791 5 22 1 12 66 112 23.2 326 LDCK & DAM 3 9 91 1 7 40 14 55 37.2 950 LOCK & DAM 4 1 11 119 115 11514 8 74 7 80 7 55 1 13 84 101 6487 22.8 LOCK & DAM 5 1 297 12919 44.7 1 11 107 8 55 3 6 58 1 14 106 110 1140 LOCK & DAM 6 1 1 LOCK & DAM 7 1 9 110 8 95 6 58 12 108 109 16932 56.4 1240 LOCK & DAM 8 1 9 107 9 114 7 55 123 11694 39.7 762 1 82 LOCK & DAM 9 1 10 55 14 95 7777 26.3 523 6 75 35.4 13 115 123 11552 1095 LOCK & DAM 10 1 10 354 8 136 60 ST ANTHONY FALLS UPPER L & D 1 2 16 9 20 3 104 0.5 1 23 4 11 32 1105 3.7 ST ANTHONY FALLS LOWER L & D 1 2 14 4 27 50 4 13 405 1 4 11 LOCK & DAM 5A 1 9 86 1 6 113 6 55 1 11 120 103 6003 20.8 498

| EROC          | DISTRICT | NAME DIVISION NAME              | HON            | MONTHS REPORTED |       |  |  |  |  |  |
|---------------|----------|---------------------------------|----------------|-----------------|-------|--|--|--|--|--|
| G2            | PORTLAND | NORTH PACIFIC                   | 10/85          | 11/85           | 12/85 |  |  |  |  |  |
|               |          |                                 |                |                 |       |  |  |  |  |  |
| RIVER         |          | LCODE-LOCK NAME                 | LEN/NID/DRAFT  | (FT/FT/FT)      |       |  |  |  |  |  |
| COLUMBIA RIVE | ir.      | 01-BONNEVILLE LOCK & DAM        | 0500/0075/15.0 |                 |       |  |  |  |  |  |
|               |          | 02-THE DALLES DAM               | 0675/0086/15.0 |                 |       |  |  |  |  |  |
|               |          | 03-JOHN DAY LOCK & DAM          | 0675/0086/15.0 |                 |       |  |  |  |  |  |
| HILLAMETTE RI | VER      | 11-WILLAMETTE FALLS LOCKS 1 - 4 | 0210/0040/ 6.5 |                 |       |  |  |  |  |  |
| <b>\</b>      |          | 15-WILLAMETTE FALLS GUARD LOCK  | 0210/0040/ 6.5 |                 |       |  |  |  |  |  |

TABLE 2

| EROC<br>G2 | DISTRICT NAME<br>PORTLAND |      |                 | SION NAM       |                |                |               | 10/8            |                  | NTHS REF |    | 12                      | 2/85               |
|------------|---------------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|----------|----|-------------------------|--------------------|
|            |                           |      |                 |                |                |                |               |                 |                  |          |    |                         |                    |
| RIVER/LO   | CK NAME                   | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>FULL | BARGES<br>TOTAL | LCKGES<br>Commer | RECRTN   |    | LCKGES<br>Total<br>(TC) | Tonnage<br>(Ktons) |
|            | COLUMBIA RIVER            |      |                 |                |                |                |               |                 |                  |          |    |                         |                    |
| BONNEVIL   | LE LOCK & DAM             | XX   | IX.             |                |                |                |               |                 |                  |          |    |                         |                    |
| UPBOUND    | STATISTICS                | 193  | 9               | 23             | 225            | 378            | 262           | 640             | 404              | 15       | 7  | 426                     | 400                |
|            | STATISTICS                | 195  | 7               | 8              | 210            | 45             | 621           | 666             | 416              | 8        | 5  | 429                     | 1300               |
| TOTAL      |                           | 388  | 16              | 31             | 435            | 423            | 883           | 1306            | 820              | 23       | 12 | 855                     | 1701               |
| THE DALL   | ES DAN                    | XX   | KI .            |                |                |                |               |                 |                  |          |    |                         |                    |
| UPBOUND    | STATISTICS                | 138  | 6               | 4              | 148            | 246            | 260           | 506             | 142              | 7        | 7  | 156                     | 454                |
| DNBOUND    | STATISTICS                | 133  | . 7             | 4              | 144            | 45             | 453           | 498             | 139              | 7        | 2  | 148                     | 1059               |
| TOTAL      |                           | 271  | 13              | 8              | 292            | 291            | 713           | 1004            | 281              | 14       | 9  | 304                     | 1513               |
| JOHN DAY   | LOCK & DAM                | XX   | (X              | •              |                |                |               |                 |                  |          |    |                         |                    |
| UPBOUND    | STATISTICS                | 136  | 5               | 4              | 145            | 237            | 259           | 496             | 143              | 5        | 2  | 150                     | 398                |
| DNBOUND    | STATISTICS                | 134  | 3               | 5              | 142            | 53             | 450           | <b>50</b> 3     | 143              | 2        | 1  | 146                     | 1080               |
| TOTAL      |                           | 270  | 8               | 9              | 287            | 290            | 709           | 999             | 286              | 7        | 3  | 296                     | 1479               |
|            | HILLAMETTE RIVER          |      |                 |                |                |                |               |                 |                  |          |    |                         |                    |
| HILLAHET   | TE FALLS LOCKS 1 - 4      | XX   | X               |                |                |                |               |                 |                  | •        |    |                         |                    |
| UPBOUND    | STATISTICS                | 251  | 34              | 25             | 310            | 141            | 188           | 329             | 347              | 29       | 1  | 377                     | 43                 |
| DNBOUND    | STATISTICS                | 220  | 31              | 51             | 302            | 4              | 280           | 284             | 321              | 32       | 1  | 354                     | 125                |
| TOTAL      |                           | 471  | 65              | 76             | 612            | 145            | 468           | 613             | 866              | 61       | 2  | 731                     | 168                |
| HILLAMET   | TE FALLS GUARD LOCK       | xx   | x               |                |                |                |               |                 |                  |          | •  |                         |                    |
|            | STATISTICS                | 251  | 35              | 153            | 439            | 143            | 112           | 255             | 378              | 26       | 1  | 405                     | 28                 |
| DME:OUND   | STATISTICS                | 217  | 31              | 185            | 433            | 8              | 211           | 219             | 363              | 27       | 1  | 391                     | 111                |
| TOTAL      |                           | 468  | 66              | 338            | 872            | 151            | 323           | 474             | 741              | 53       | 2  | 796                     | 139                |
|            |                           |      |                 |                |                |                |               |                 |                  |          |    |                         |                    |

| EROC<br>G2 | DISTRICT NAME<br>PORTLAND |     |              |     | VISION |      |    |                     |       |     |   | 10/8        | 15 | MONTHS REP   |                           | 12/                               | 85                         |
|------------|---------------------------|-----|--------------|-----|--------|------|----|---------------------|-------|-----|---|-------------|----|--------------|---------------------------|-----------------------------------|----------------------------|
|            |                           | HIN | APPRO<br>AVG |     | : HIN  | ENTR | Y  | CESSING<br>C<br>HIN | HAMBE | R   |   | EXIT<br>AVG |    | DELAYED TONS | S EXPRESS DELAY TIME TOMS | SED IN MI<br>DELAY<br>AVG<br>TOMS | NUTES DELAY HAX (ALL VSLS) |
|            | COLUMBIA RIVER            |     |              |     |        |      |    |                     |       |     |   |             |    |              |                           |                                   |                            |
| 80NMEVILL  | E LOCK & DAM              | 1   | 7            | 268 | 1      | 7    | 60 | 1                   | 23    | 203 | 1 | 4           | 27 | 371          | 23990                     | 61.8                              | 455                        |
| THE DALLE  | S DAM                     | 1   | 5            | 20  | 2      | 6    | 35 | 8                   | 22    | 85  | 1 | 5           | 23 | 221          | 2573                      | 9.4                               | 55                         |
| JOHN DAY   | LOCK & DAM                | 1   | 5            | 25  | 1      | 6    | 19 | 13                  | 26    | 80  | 2 | 5           | 14 | 269          | 2758                      | 10.2                              | 80                         |
| i          | WILLAMETTE RIVER          |     |              |     |        |      |    |                     |       |     |   |             |    |              |                           |                                   |                            |
| HILLAMETT  | E FALLS LOCKS 1 - 4       | 1   | 1            | 5   | 1      | 1    | 19 | 1                   | 34    | 125 | 1 | 2           | 62 | 471          | 488                       | 1.0                               | 15                         |
| WILLAMETT  | E FALLS GUARD LOCK        | 1   | 1            | 2   | 1      | 1    | 4  | 1                   | 1     | 61  | 1 | 1           | 11 | 468          | 468                       | 1.0                               | 2                          |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR HATER RESOURCES

EROC DISTRICT NAME G3 SEATTLE MONTHS REPORTED DIVISION NAME

10/85 11/85 12/85 NORTH PACIFIC

LEN/WID/DRAFT (FT/FT/FT) LCODE-LOCK NAME

LAKE MASHINGTON SHP CA 01-HIRAM M CHITTENDEN LOCKS 0760/0080/30.0 0150/0028/25.0 01-HIRAM M CHITTENDEN LOCKS AUX1

| EROC       | DISTRICT NAME        |      | DIV             | ISION N        | AME            |                |               |                 | MO               | INTHS REP                | ORTED           |                        |                    |
|------------|----------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|-----------------|------------------------|--------------------|
| <b>C3</b>  | SEATTLE              |      | NOR             | TH PACI        | FIC            |                |               | 10/8            | 35               | 11/8                     | 5               | 12                     | 2/85               |
| RIVER/LOCK | NAME                 | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>TOTAL | LCKGES<br>Commer | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER | LCKGES<br>TOTAL<br>TC) | Tonnage<br>(Ktons) |
| L          | AKE WASHINGTON SHP ( | CA   |                 |                |                |                |               |                 |                  |                          |                 |                        |                    |
| HIRAM H CH | ITTENDEN LOCKS       | XX   | M ONLY          | SECOND         | AND THIRD      | HONTHS         | REPORTED      |                 |                  |                          |                 |                        |                    |
| upbound s  | TATISTICS            | 142  | 61              | 143            | 346            | 56             | 127           | 183             | 301              | 5                        | 26              | 332                    | 198                |
| DNBOUND S  | TATISTICS            | 167  | 76              | 114            | 357            | 134            | 312           | 446             | 290              | 4                        | 21              | 315                    | <b>98</b>          |
| TOTAL      |                      | 309  | 137             | 257            | 703            | 190            | 439           | 629             | 591              | 9                        | 47              | 647                    | 296                |
| HIRAM N CH | ITTENDEN LOCKS AUX1  | XX   | K.              |                |                |                |               |                 |                  |                          |                 |                        |                    |
| UPBOUND S  | TATISTICS            | 19   | 1177            | 187            | 1383           | 12             | 7             | 19              | 440              | 420                      | 49              | 909                    | 0                  |
| DNBOUND S  | TATISTICS            | 20   | 1304            | . 175          | 1499           | 9              | 11            | 20              | 393              | 492                      | 49              | 934                    | 0                  |
| TOTAL      |                      | 39   | 2481            | 362            | 2882           | 21             | 18            | 39              | 833              | 912                      | 98              | 1843                   | 0                  |

| EROC<br>G3 | DISTRICT NAME<br>SEATTLE |       |              |    | VISION |      |    |        |        |    | ~           | 10/(        | B5  | HONTHS REP            |                                    | 12/                               | ′85<br>                    |
|------------|--------------------------|-------|--------------|----|--------|------|----|--------|--------|----|-------------|-------------|-----|-----------------------|------------------------------------|-----------------------------------|----------------------------|
|            |                          | MIN   | APPRO<br>AVG | _  | : HIN  | ENTR | Y  | CESSIN | CHAMBE | R  | .)<br>: HIN | EXIT<br>AVG | HAX | ALL TIME DELAYED TONS | S EXPRESS<br>DELAY<br>TIME<br>TOWS | SED IN MI<br>DELAY<br>AVG<br>TOMS | ENUTES DELAY HAX (ALL VSLS |
|            | LAKE WASHINGTON S        | HP CA |              |    |        |      |    |        |        |    |             |             |     |                       |                                    |                                   |                            |
| HIRAN N    | CHITTENDEN LOCKS         | 1     | 2            | 57 | 1      | 3    | 25 | 2      | 11     | 34 | 1           | 3           | 31  | 280                   | 2401                               | 7.7                               | 260                        |
| HIRAM M (  | CHITTENDEN LOCKS A       | UX 1  | 1            | 8  | 1      | 1    | 24 | 2      | 4      | 24 | 1           | 5           | 26  | 2                     | 7                                  | 0.1                               | 1610                       |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

**EROC** DISTRICT NAME DIVISION NAME **HONTHS REPORTED** HALLA HALLA **NORTH PACIFIC** 10/85 11/85 12/85 RIVER LCODE-LOCK NAME LEN/WID/DRAFT (FT/FT/FT) COLUMBIA RIVER 24-HCNARY LOCK & DAN 0675/0086/14.0 SNAKE RIVER 01-ICE HARBOR LOCK & DAM 0670/0086/14.0 02-LOHER HONUMENTAL LOCK & DAM 0670/0086/14.0 03-LITTLE GOOSE LOCK & DAM 0670/0086/14.0 04-LOHER GRANITE LOCK & DAM 0670/0086/14.0

TABLE 2

| EROC           | DISTRICT NAME       |      | DIVI            | CSION NAM      | Œ              |                |               |                 | MC     | INTHS REF                | PORTED |            |                    |
|----------------|---------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|--------|--------------------------|--------|------------|--------------------|
| G4             | HALLA HALLA         |      | NORT            | TH PACIFI      | CC             |                |               | 10/8            | 35<br> | 11/8                     | 35     | 17         | 2/85               |
| RIVER/LOC      | CK NAME             | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>TOTAL |        | LCKGES<br>RECRTN<br>(NAV |        | TOTAL      | Tonnage<br>(Ktons) |
|                | COLUMBIA RIVER      |      |                 |                |                |                |               |                 |        |                          |        |            |                    |
| MCNARY LO      | ICK . DAN           | X1   | EX.             |                |                |                |               |                 |        |                          |        |            |                    |
| UPBOUND        | 705                 | 133  | 14              | 9              | 156            | 202            | 254           | 456             | 140    | 9                        | 1      | 150        | 394                |
| DNBOUND        | t ATISTILS          | 129  | 14              | 9              | 152            | 57             | 407           | 464             | 137    | 9                        | 1      | 147        | 927                |
| TOTAL          |                     | 262  | 28              | 18             | 308            | 259            | 661           | 920             | 277    | 18                       | 2      | 297        | 1322               |
|                | SNAKE RIVER         |      |                 |                |                |                |               |                 |        |                          |        |            |                    |
| ICE HARBO      | R LOCK & DAM        | X1   | EX              |                |                |                |               |                 |        |                          |        |            |                    |
| <b>UPBOUND</b> | STATISTICS          | 118  | 23              | 19             | 160            | 212            | 58            | 270             | 137    | 15                       | · 1    | 153        | 29                 |
| DNBOUND        | STATISTICS          | 118  | 20              | 19             | 157            | 5              | 273           | 278             | 138    | 16                       | 1      | 155        | 636                |
| TOTAL          |                     | 236  | 43              | 38             | 317            | 217            | 331           | 548             | 275    | 31                       | 2      | 308        | 665                |
| LONER HON      | IUHENTAL LOCK & DAM | X.   | EX              |                |                |                |               |                 |        |                          |        |            |                    |
| UPBOUND        | STATISTICS          | 77   | 7               | 3              | 87             | 185            | 60            | 245             | 81     | 6                        | 1      | 88         | 36                 |
| DNBOUND        | STATISTICS          | 77   | 7               | 3              | 87             | 10             | 242           | 252             | 81     | 7                        | 1      | 89         | 555                |
| TOTAL          |                     | 154  | 14              | 6              | 174            | 195            | 302           | 497             | 162    | 13                       | 2      | 177        | 592                |
| LITTLE GO      | IOSE LOCK & DAM     | X    | K I             |                |                |                |               |                 |        |                          |        |            |                    |
| <b>UPBOUND</b> | STATISTICS          | 76   | 15              | 3              | 94             | 170            | 59            | 229             | 78     | 12                       | 2      | 92         | 33                 |
| DNBOUND        | STATISTICS          | 76   | 15              | 3              | 94             | 10             | 226           | 236             | 81     | 13                       | 1      | <b>9</b> 5 | 502                |
| TOTAL          |                     | 152  | 30              | 6              | 188            | 180            | 285           | 465             | 159    | 25                       | 3      | 187        | 536                |
| LONER GRA      | NITE LOCK & DAM     | X1   | EX              |                |                |                |               |                 |        |                          |        |            |                    |
|                | STATISTICS          | 72   | 25              | 4              | 101            | 106            | 58            | 164             | 77     | 24                       | 0      | 101        | 30                 |
| DNBOUND        | STATISTICS          | 71   | 26              | 5              | 102            | 7              | 160           | 167             | 76     | 25                       | 1      | 102        | 325                |
| TOTAL          |                     | 143  | 51              | 9              | 203            | 113            | 218           | 331             | 153    | 49                       | 1      | 203        | 355                |
|                |                     |      |                 |                |                |                |               |                 |        |                          |        |            |                    |

| EROC DISTRICT NAME<br>G4 HALLA HALLA |   |              |    | CVISION<br>ORTH PA |      |    |      |        |                     |   | 10/8        |       | HONTHS REP |                           | 12.                               | /85                         |
|--------------------------------------|---|--------------|----|--------------------|------|----|------|--------|---------------------|---|-------------|-------|------------|---------------------------|-----------------------------------|-----------------------------|
|                                      |   | APPRO<br>AVG |    | : HIN              | ENTR | Y  | (    | CHAMBE | (MIN.<br>R<br>MAX : |   | EXIT<br>AVG | HAX : |            | S EXPRESS DELAY TIME TOWS | SED IN MI<br>DELAY<br>AVG<br>TOWS | INUTES DELAY MAX (ALL VSLS) |
| COLUMBIA RIVER                       |   |              |    |                    |      |    |      |        |                     |   |             |       |            |                           |                                   |                             |
| HCNARY LOCK & DAN                    | 2 | 4            | 16 | 2                  | 6    | 21 | 10   | 16     | 45                  | 2 | 6           | 20    | 262        | 1350                      | 5.1                               | 51                          |
| SNAKE RIVER                          |   |              |    |                    |      |    |      |        |                     |   |             |       |            |                           |                                   |                             |
| ICE HARBOR LOCK & DAM                | 2 | 3            | 9  | 2                  | 4    | 19 | 10   | 22     | 50                  | 2 | 3           | 11    | 236        | 1157                      | 4.9                               | 57                          |
| LOHER HONUMENTAL LOCK & DAM          | 1 | 4            | 13 | . 2                | 6    | 20 | . 14 | 24     | 38                  | 2 | 5           | 13    | 154        | 889                       | 5.7                               | 60                          |
| LITTLE GOOSE LOCK & DAM              | 2 | 3            | 18 | 2                  | 4    | 19 | 11   | 15     | 29                  | 1 | 5           | 15    | 152        | 740                       | 4.8                               | 28                          |
| LOWER GRANITE LOCK & DAM             | 1 | 3            | 13 | 2                  | 4    | 16 | 9    | 13     | 32                  | 1 | 4           | 11    | 143        | 670                       | 4.6                               | 63                          |

| EROC .       | DISTRICT NAME         | DIVISION NAME          | HO             | NTHS REPORTED       |       |
|--------------|-----------------------|------------------------|----------------|---------------------|-------|
| H1           | HUNTINGTON            | OHIO RIVER             | 10/85          | 11/85               | 12/85 |
| RIVER        | LCODE-LOCK            | NAME                   | LEN/HID/DRAFT  | ( <b>FT/F</b> T/FT) |       |
| KANAHHA RIVE | R 01-HINFIEL          | D LOCKS & DAM MAIN 1   | 0360/0056/12.0 |                     |       |
|              | 01-WINFIEL            | D LOCKS & DAM MAIN 2   | 0360/0056/12.0 |                     |       |
|              | 02-MARMET             | LOCKS & DAN HAIN 1     | 0360/0056/12.0 |                     |       |
|              | 02-MARMET             | LOCKS & DAM MAIN 2     | 0360/0056/12.0 |                     |       |
|              | 03-LONDON             | LOCKS & DAM MAIN 1     | 0360/0056/12.0 |                     |       |
|              | 03-LO <del>ndon</del> | LOCKS & DAM MAIN 2     | 0360/0056/12.0 |                     |       |
| OHIO RIVER   | 21-BELLEVI            | LLE LOCKS & DAN        | 1200/0110/12.0 |                     |       |
|              | 21-BELLEVI            | LLE LOCKS & DAN AUX 1  | 0600/0110/12.0 |                     |       |
|              | 22-RACINE             | LOCKS & DAM            | 1200/0110/12.0 |                     |       |
|              | 22-RACINE             | LOCKS & DAM AUX 1      | 0600/0110/12.0 |                     |       |
|              | 23-GALLIPO            | LIS LOCKS & DAM        | 0600/0110/12.0 |                     |       |
|              | 23-GALLIPO            | LIS LOCKS & DAM AUX 1  | 0360/0110/12.0 |                     |       |
|              | 24-GREENUP            | LOCKS & DAH            | 1200/0110/12.0 |                     |       |
|              | 24-GREENUP            | LOCKS & DAM AUX 1      | 0600/0110/12.0 |                     |       |
|              | 25-Capt an            | T NELDAHL LOCKS & DAM  | 1200/0110/12.0 |                     |       |
|              | 25-Capt an            | T MELDAHL LK&DAM AUX 1 | 0600/0110/12.0 |                     |       |
|              | 72-WILLOW             | ISLAND LOCKS & DAM     | 1200/0110/12.0 |                     |       |
|              | 72-WILLOW             | ISLAND LOCKS & DAM AUX | 0600/0110/12.0 |                     |       |

| EROC<br>H1         | DISTRICT NAME<br>HUNTINGTON |      | DINO            | SION MAN |                |                |               | 10/6            |      | NTHS REF<br>11/8 | 5  |             | !/ <b>8</b> 5      |
|--------------------|-----------------------------|------|-----------------|----------|----------------|----------------|---------------|-----------------|------|------------------|----|-------------|--------------------|
| <b>rive</b> r/lock | ( NAME                      | TONS | VESSL<br>RECRTN |          | VESSL<br>TOTAL | BARGS<br>ENPTY | BARGS<br>FULL | BARGES<br>TOTAL |      | RECRIN           |    | TOTAL       | Tonnage<br>(Ktons) |
| <u></u>            | (ANAWHA RIVER               |      |                 |          |                |                |               | *               |      |                  |    |             |                    |
| NIMFIELD L         | OCKS & DAN MAIN 1           | XX   | <b>x</b>        |          |                |                |               |                 |      |                  |    |             |                    |
|                    |                             | 272  | 3               | 25       | 300            | 1237           | 368           | 1605            | 1096 | 7                | 0  | 1103        | 544                |
|                    |                             | 317  | 17              | 20       | 354            | 233            | 1695          | 1928            | 1276 | 15               | 3  | 1294        | 2000               |
| TOTAL              |                             | 589  | 20              | 45       | 654            | 1470           | 2063          | 3533            | 2372 | 22               | 3  | 2397        | 2545               |
| <b>INFIE</b> LD L  | OCKS & DAH MAIN 2           | XX   | <b>x</b>        |          |                |                |               |                 |      |                  |    |             |                    |
| UPBOUND S          | TATISTICS                   | 253  | 14              | 17       | 284            | 1309           | 266           | 1575            | 991  | 11               | 15 | 1017        | 367                |
| DNBOUND S          | TATISTICS                   | 225  | 23              | 16       | 264            | 226            | 1058          | 1284            | 831  | 10               | 10 | 851         | 1230               |
| TOTAL              |                             | 478  | 37              | 33       | 548            | 1535           | 1324          | 2859            | 1822 | 21               | 25 | 1868        | 1598               |
| ARMET LOC          | KS & DAM HAIN 1             | II   | x               |          |                |                |               |                 |      |                  |    |             |                    |
| UPBOUND S          | TATISTICS                   | 174  | 3               | 12       | 189            | 818            | 83            | 901             | 641  | 10               | 0  | 651         | 102                |
| DMBOUND S          | TATISTICS                   | 221  | 6               | 19       | 246            | 58             | 1079          | 1137            | 873  | 10               | 0  | 883         | 1350               |
| TOTAL              |                             | 395  | 9               | 31       | 435            | 876            | 1162          | 2038            | 1514 | 20               | 0  | 1534        | 1453               |
| HARHET LOC         | KS & DAH HAIN 2             | IX   | 1               |          |                |                |               |                 |      |                  |    |             |                    |
| UPBOUND S          | TATISTICS                   | 214  | 30              | 32       | 276            | 885            | 59            | 944             | 741  | 39               | 3  | <b>78</b> 3 | 81                 |
| DNBOUND S          | TATISTICS                   | 167  | 9               | 28       | 204            | 41             | 678           | 719             | 548  | 22               | 2  | 572         | 829                |
| TOTAL              |                             | 381  | 39              | 60       | 480            | 926            | 737           | 1663            | 1289 | 61               | 5  | 1355        | 910                |
| ONDON LOC          | KS & DAM MAIN 1             | XX   | <b>x</b>        |          |                |                |               |                 |      |                  |    |             |                    |
| upbound s          | TATISTICS                   | 56   | 0               | 10       | 66             | 158            | 13            | 171             | 156  | 0                | 2  | 158         | 14                 |
| <b>DMBOUND</b> S   | TATISTICS                   | 62   | 0               | 8        | 70             | 1              | 172           | 173             | 161  | 0                | 0  | 161         | 230                |
| TOTAL              |                             | 118  | 0               | 18       | 136            | 159            | 185           | 344             | 317  | 0                | 2  | 319         | 245                |
| <b>ondon</b> loc   | KS & DAM MAIN 2             | XX   | E .             |          |                |                |               |                 |      |                  |    |             |                    |
| <b>Upbound</b> S   | TATISTICS                   | 145  | 5               | 25       | 175            | 376            | 12            | 388             | 375  | 11               | 2  | 388         | 13                 |
| <b>DNIBOUND</b> S  | TATISTICS                   | 143  | 4               | 13       | 160            | 4              | 378           | 382             | 361  | 9                | 2  | 372         | 536                |
| TOTAL              |                             | 288  | 9               | 38       | 335            | 380            | 390           | 770             | 736  | 20               | 4  | 760         | 549                |
| 0                  | HIO RI <b>VE</b> R          |      |                 |          |                |                |               |                 |      |                  |    |             |                    |
| ELLEVILLE          | LOCKS & DAM                 | XX   | <b>K</b>        |          |                |                |               |                 |      |                  |    |             |                    |
| UPBOUND S          | TATISTICS                   | 371  | 0               | 6        | 377            | 689            | 3440          | 4129            | 373  | 0                | 1  | 374         | 4947               |
| <b>DNBOUND</b> S   |                             | 334  | 3               | 4        | 341            | 1944           | 1914          | 3858            | 337  | 1                | 1  | 339         | 2685               |
| TOTAL              |                             | 705  | 3               | 10       | 718            | 2633           | 5354          | 7987            | 710  | 1                | 2  | 713         | 7633               |

TABLE 2

|                   | DISTRICT NAME<br>HUNTINGTON |      |                 | ISION I<br>O RIVE |             |                |          | 10/             |                  | ONTHS REP<br>11/8 |    | 1:                      | 2/ <b>8</b> 5      |
|-------------------|-----------------------------|------|-----------------|-------------------|-------------|----------------|----------|-----------------|------------------|-------------------|----|-------------------------|--------------------|
| RIVER/LOCK NA     | ME                          |      | VESSL<br>RECRTN | VESSI<br>OTHEI    |             | BARGS<br>Empty |          | BARGES<br>TOTAL | LCKGES<br>Commer | RECRTN            |    | LCKGES<br>Total<br>ETC) | Tonnage<br>(Ktons) |
| OHIO              | RIVER                       |      |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| BELLEVILLE LO     | CKS & DAM AUX 1             | XXX  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STAT      |                             | 20   | 34              | 12                | . 66        | 14             | 56       | 70              | 31               | 18                | 4  | 53                      | 58                 |
| DNBOUND STAT      |                             | 52   | 45              | - 6               |             | 123            | 50       | 173             | 59               | 26                | 5  | 90                      | 66                 |
| TOTAL             |                             | 72   | 79              | 18                |             | 137            | 106      | 243             | 90               | 44                | 9  | 143                     | 124                |
| RACINE LOCKS      | R DAM                       | ***  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STAT      |                             | 399  | 0               | 15                | 414         | 882            | 3490     | 4372            | 403              | 0                 | 0  | 403                     | 4949               |
| DNBOUND STAT      |                             | 372  | 7               | 5                 |             | 1999           | 2092     | 4091            | 378              | i                 | 3  | 382                     | 2814               |
| TOTAL             |                             | 771  | 7               | 24                |             | 2881           | 5582     | 8463            | 781              | i                 | 3  | 785                     | 7763               |
| RACINE LOCKS      | R DAM ALLY 1                | XXX  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STAT      |                             | 27   | 30              | 15                | 72          | 53             | 23       | 76              | 36               | 8                 | 9  | 53                      | 31                 |
| DNBOUND STAT      |                             | 43   | 42              | 10                |             | 64             | 68       | 132             | 51               | 23                | 10 | 94                      | 67                 |
| TOTAL             | 131103                      | 70   | 72              | 25                |             | 117            | 91       | 208             | 87               | 31                | 19 | 137                     | 99                 |
| TOTAL             |                             | 70   | ,,              | 20                | 107         | 117            | 71       | 200             | 07               | 31                | 17 | 13/                     | 77                 |
| GALLIPOLIS LO     |                             | XXX  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STAT      |                             | 480  | 15              | 33                |             | 1009           | 3305     | 4314            | 796              | 6                 | 8  | 810                     | 5070               |
| DNBOUND STAT      | ISTICS                      | 471  | 28              | 34                |             | 1741           | 2421     | 4162            | 769              | 20                | 4  | 793                     | 3477               |
| TOTAL             |                             | 951  | 43              | 67                | 1061        | 2750           | 5726     | 8476            | 1565             | 26                | 12 | 1603                    | 8548               |
| GALLIPOLIS LOG    | CKS & DAM AUX 1             | XXX  | NO C            | )ATA RE           | CORDED FOR  | THIS LO        | OCK      |                 |                  |                   |    |                         |                    |
| GREENUP LOCKS     | & DAM                       | XXX  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STATE     | ISTICS                      | 594  | 8               | 18                | 620         | 4185           | 1938     | 6123            | 601              | 3                 | 1  | 605                     | 2919               |
| DABOUND STATE     | ISTICS                      | 594  | 10              | 12                |             | 745            | 5379     | 6124            | 600              | 3                 | 2  | 605                     | 8122               |
| TOTAL             |                             | 1188 | 18              | 30                |             | 4930           | 7317     | 12247           | 1201             | 6                 | 3  | 1210                    | 11042              |
| GREENUP LOCKS     | R DAM AUX 1                 | IIX  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPBOUND STATE     | <del>-</del>                | 82   | 149             | 41                | <b>27</b> 2 | 194            | 48       | 242             | 121              | 75                | 3  | 149                     | 69                 |
| DNEOUND STATE     |                             | 75   | 105             | 55                |             | 90             | 95       | 185             | 126              | 55                | 3  | 184                     | 139                |
| TOTAL             |                             | 157  | 254             | 96                |             | 284            | 143      | 427             | 247              | 130               | 6  | 313                     | 208                |
|                   |                             |      |                 |                   |             |                |          |                 |                  |                   | -  | •                       |                    |
|                   | HL LOCKS & DAN              | III  |                 |                   |             |                |          |                 |                  |                   |    |                         |                    |
| UPPOUND STATE     |                             | 563  | 41              | 8                 | 612         | 3836           | 2206     | 6042            | 570              | 32                | 0  | 602                     | 3405               |
| SNEOUND FATI      | 51105                       | 546  | 65              | 14                | 625         | 686            | 5272     | 5958            | 557              | 46                | 0  | 603                     | 7950               |
| OTAL              |                             | 1109 | 106             | 22                | 1237        | 4522           | 7478     | 12000           | 1127             | 78                | 0  | 1205                    | 11356              |
| 10 T.W            | ા ⊹ શDAh AUX 1              | TTT  | ONLY            | SECOND            | AND THIRD   | HONTHS         | REPORTED |                 |                  |                   |    |                         |                    |
| right.            | To the                      | 14   | 0               | 1                 | 15          | 27             | 18       | 45              | 15               | 0                 | 0  | ,                       | 26                 |
| r <sub>0</sub> (. | . •                         | 19   | 4               | 4                 | 27          | 35             | 24       | 59              | 22               | 4                 | 1  |                         | 23                 |
| -1                |                             | 33   | 4               | 5                 | 42          | 62             | 42       | 104             | 37               | 4                 | 1  | ٠.                      | Çç                 |

| EROC              | DISTRICT NAME       |      |                 | SION NAM       | Œ              |                |               |                 | HC               | INTHS REF                |                           |                         |                    |
|-------------------|---------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|---------------------------|-------------------------|--------------------|
| H1                | HUNTINGTON          |      | OHIO            | RIVER          |                |                |               | 10/8            | 35<br>           | 11/8                     | 5<br>                     | 12                      | ?/ <b>8</b> 5<br>  |
| RIVER/LOCK        | ( NAME              | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>Total | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>TOTAL | LCKGES<br>Commer | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER<br>OPN, E | LCKGES<br>TOTAL<br>ETC) | Tonnage<br>(Ktons) |
| 0                 | HIO RIVER           |      |                 |                |                |                |               |                 |                  |                          |                           |                         |                    |
| WILLOW ISL        | AND LOCKS & DAM     | XX   | X               |                |                |                |               |                 |                  |                          |                           |                         |                    |
| upbound s         | TATISTICS           | 336  | 1               | 8              | 345            | 695            | 3064          | 3759            | 341              | 0                        | 1                         | 342                     | 4250               |
| <b>DNBOUN</b> O S | TATISTICS           | 325  | 2               | 3              | 330            | 1712           | 1857          | 3569            | 328              | 1                        | 1                         | 330                     | <b>25</b> 37       |
| TOTAL             |                     | 661  | 3               | 11             | 675            | 2407           | 4921          | 7328            | 669              | 1                        | 2                         | 672                     | 6787               |
| WILLOW ISL        | AND LOCKS & DAN AUX | **   | X               |                |                |                |               |                 |                  |                          |                           |                         |                    |
| <b>UPBOUND</b> S  | TATISTICS           | 57   | 7               | 20             | 84             | 54             | 115           | 169             | 78               | 6                        | 5                         | 89                      | 95                 |
| <b>DNBOUN</b> D S | TATISTICS           | 67   | 19              | 16             | 102            | 136            | 70            | 206             | 85               | 17                       | 6                         | 108                     | 90                 |
| TOTAL             |                     | 124  | 26              | 36             | 186            | 190            | 185           | 375             | 163              | 23                       | 11                        | 197                     | 185                |

| EROC       | DISTRICT | r name     | DIVISION NAME       | H             | IONTHS REPORTED |       |
|------------|----------|------------|---------------------|---------------|-----------------|-------|
| H2<br>     | LOUISVII | LE         | OHIO RIVER          | 10/85         | 11/85           | 12/85 |
| RIVER      |          | LCODE-LOCK | NAME                | LEN/HID/DRAF  | T (FT/FT/FT)    |       |
| GREEN/BARF | EN RIVER | 21-LOCK &  | DAM 1               | 0600/0084/12  | 0               |       |
|            |          | 22-LOCK &  | DAN 2               | 0600/0084/12. | 0               |       |
| OHIO RIVER | 1        | 41-HARKLAN | D LOCKS & DAM       | 1200/0110/12. | 0               |       |
|            |          | 41-HARKLAN | D LOCKS & DAM AUX 1 | 0600/0110/12. | 0               |       |
|            |          | 42-MCALPIN | E LOCKS & DAM       | 1200/0110/12. | 0               |       |
|            |          | 42-MCALPIN | E LOCKS & DAM AUX 1 | 0600/0110/12. | 0               |       |
|            |          | 52-LOCK &  | DAN 52              | 1200/0110/12. | 0               |       |
|            |          | 52-LOCK &  | DAM 52 AUX 1        | 0600/0110/12. | 0               |       |
|            |          | 75-CANNELT | on lock & Dam       | 1200/0110/12  | 0               |       |
|            |          | 75-CANNELT | on lock & Dan aux   | 0600/0110/12. | 0               |       |
|            |          | 76-NEXBURG | H LOCK & DAH        | 1200/0110/12. | 0               |       |
|            | •        | 76-NEWBURG | H LOCK & DAM AUX 1  | 0600/0110/12. | 0               |       |
|            |          | 77-UNIONTO | HN LOCK & DAN       | 1200/0110/12. | 0               |       |
|            |          | 77-UNIONTO | HN LOCK & DAM AUX 1 | 0600/0110/12. | 0               |       |
|            |          | 78-SMITHLA | ND LOCK & DAM       | 1200/0110/12  | 0               |       |
|            |          | 78-SMITHLA | ND LOCK & DAM AUX 1 | 1200/0110/12  | .0              |       |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR HATER RESOURCES

162 461

DNEOUND STATISTICS TOTAL

 126
 6
 20
 152
 162
 461
 623
 137
 4
 0
 141
 686

 246
 34
 40
 320
 488
 726
 1214
 268
 16
 9
 284
 1162

TABLE 2

| EROC DISTRICT NAME H2 LOUISVILLE |      | OHI      | ISION N<br>O RIVER | AME<br>   |                |               | 10/8  | 35     | NTHS REP       | 15           |               | 2/85               |
|----------------------------------|------|----------|--------------------|-----------|----------------|---------------|-------|--------|----------------|--------------|---------------|--------------------|
| RIVER/LOCK NAME                  | TONS |          | VESSL<br>OTHER     | TOTAL     | BARGS<br>EMPTY | BARGS<br>Full | TOTAL | COMMER | RECRTN<br>(NAV | OTHER OPN, E | TOTAL<br>(TC) | TONNAGE<br>(KTONS) |
| OHIO RIVER                       |      |          |                    |           |                |               |       |        |                |              |               |                    |
| CANNELTON LOCK & DAM             | 111  | <b>T</b> |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 620  | 14       | 22                 | 656       | 3161           | 3506          | 6667  | 632    | 6              | 2            | 640           | 5430               |
| DNBOUND STATISTICS               | 607  | 59       | 35                 | 701       | 823            | 5746          | 6569  | 626    | 24             | 1            | 651           | 8252               |
| TOTAL                            | 1227 | 73       | 57                 | 1357      | 3984           | 9252          | 13236 | 1258   | 30             | 3            | 1291          | 13683              |
| CANNELTON LOCK & DAM AUX         | XX   | CONLY    | SECOND             | AND THIRD | HONTHS         | REPORTED      |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 33   | 3        | 14                 | 50        | 129            | 120           | 249   | 57     | 1              | 3            | 61            | 173                |
| DNBOUND STATISTICS               | 41   | 38       | 10                 | 89        | 87             | 296           | 383   | 69     | 21             | 2            | 92            | 432                |
| TOTAL                            | 74   | 41       | 24                 | 139       | 216            | 416           | 632   | 126    | 22             | 5            | 153           | 605                |
| NENBURGH LOCK & DAN              | XX   | <b>K</b> |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 716  | 6        | 30                 | 752       | 3803           | 3604          | 7407  | 724    | 0              | 0            | 724           | 5585               |
| DMBOUND STATISTICS               | 698  | 7        | 22                 | 727       | 987            | 6458          | 7445  | 711    | 1              | 1            | 713           | 9216               |
| TOTAL                            | 1414 | 13       | 52                 | 1479      | 4790           | 10062         | 14852 | 1435   | 1              | 1            | 1437          | 14801              |
| NENBURGH LOCK & DAN AUX 1        | XXI  | R        |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 71   | 150      | 20                 | 241       | 113            | 92            | 205   | 95     | 107            | 4            | 206           | 151                |
| DNBOUND STATISTICS               | 69   | 196      | 45                 |           | 86             | 85            | 171   | 117    | 153            | 2            | 272           | 118                |
| TOTAL                            | 140  | 346      | 65                 | 551       | 199            | 177           | 376   | 212    | 260            | 6            | 478           | 269                |
| UNIONTOHN LOCK & DAH             | XX   | I.       |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 806  | 4        | 14                 | 824       | 6218           | 3018          | 9236  | 812    | 1              | 1            | 814           | 4737               |
| DMBOUND STATISTICS               | 832  | 13       | 6                  | 851       | 923            | 8473          | 9396  | 834    | 4              | 0            | 838           | 12498              |
| TOTAL                            | 1638 | 17       | 20                 | 1675      | 7141           | 11491         | 18632 | 1646   | 5              | 1            | 1652          | 17236              |
| UNIONTOWN LOCK & DAM AUX 1       | EXI  | ı        |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 37   | 204      | 17                 | 258       | 62             | 23            | 85    | 53     | 162            | 3            |               |                    |
| DNBOUND STATISTICS               | 37   | 246      | 18                 | 301       | 53             | 27            | 80    | 56     | 198            | 3            | 257           | 42                 |
| TOTAL                            | 74   | 450      | 35                 | 559       | 115            | 50            | 165   | 109    | 360            | 6            | 475           | 92                 |
| SHITHLAND LOCK & DAM             | 771  | t        |                    |           |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 195  | 5        | 20                 | 220       | 1071           | 580           | 1651  | 208    | 4              | 0            | 212           | 938                |
| DNBOUND STATISTICS               | 830  | 37       | 30                 | 897       | 770            | 8138          | 8908  | 848    | 26             | 0            | 874           | 12238              |
| TOTAL                            | 1025 | 42       | 50                 | 1117      | 1841           | 8718          | 10559 | 1056   | 30             | 0            | 1086          | 13177              |
| SHITHLAND LOCK & DAM AUX 1       | **   |          | SECOND             | AND THIRD |                |               |       |        |                |              |               |                    |
| UPBOUND STATISTICS               | 776  | 10       | 45                 | 831       | 6303           | 2503          | 8806  | 797    | 7              | 4            | 808           | 3924               |
| DNBOUND STATISTICS               | 167  | 33       | 13                 | 213       | 272            | 1474          | 1746  | 177    | 29             | 3            | 209           | 2217               |
| TOTAL                            | 943  | 43       | 58                 | 1044      | 6575           | 3 <b>977</b>  | 10552 | 974    | 36             | 7            | 1017          | 6142               |

# PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR WATER RESOURCES

DISTRICT NAME DIVISION NAME **EROC** HONTHS REPORTED 12/85 H2 LOUISVILLE OHIO RIVER 10/85 11/85

|                            |    |              |       |        | LOCK  | ( PROC | ESSIN | ; TIME | (MIN | l.) |             | :   | ALL TIMES DELAYED | EXPRESS<br>DELAY | SED IN MI<br>DELAY | NUTES<br>Delay   |
|----------------------------|----|--------------|-------|--------|-------|--------|-------|--------|------|-----|-------------|-----|-------------------|------------------|--------------------|------------------|
|                            |    | APPRI<br>AVG |       | : HIN  | ENTR  | tY     |       | CHAMBE | :R   |     | EXIT<br>AVG | MAX | TOWS              | TIME<br>TOWS     | AVG<br>TONS        | MAX<br>(ALL VSLS |
| GREEN/BARREN RIVER         | ·  |              |       |        |       |        |       |        |      |     |             |     |                   |                  |                    |                  |
| LOCK & DAH 1               | 1  | 4            | 16    | 1      | 2     | 15     | 1     | 6      | 25   | 1   | 4           | 17  | 90                | 1745             | 1.9                | 60               |
| LOCK & DAM 2               | 1  | 5            | 25    | 1      | 3     | 15     | 1     | 12     | 50   | 1   | 4           | 60  | 71                | 2096             | 3.3                | 255              |
| OHIO RIVER                 |    |              |       |        |       |        |       |        |      |     |             |     |                   |                  |                    |                  |
| MARKLAND LOCKS & DAM       | 1  | 21           | 165   | . 1    | 9     | 30     | 5     | 13     | 35   | 2   | 9           | 33  | 588               | 47661            | 43.2               | 780              |
| MARKLAND LOCKS & DAM AUX 1 | 1  | 11           | 60    | 1      | 3     | 18     | 9     | 12     | 32   | 1   | 5           | 18  | 9                 | 296              | 3.7                | 73               |
| MCALPINE LOCKS & DAM       | 1  | 17           | 78    | 1      | 9     | 30     | 5     | 11     | 32   | 1   | 8           | 50  | 843               | 76623            | 57.5               | 550              |
| MCALPINE LOCKS & DAM AUX 1 | NO | DATA         | RECOR | DED FO | R THI | S LOC  | K     |        | •    |     |             |     |                   |                  |                    | •                |
| LOCK & DAM 52              | 1  | 4            | 128   | 1      | 4     | 35     | 1     | 5      | 57   | 1   | 6           | 51  | 408               | 558553           | 274.0              | 3830             |
| LOCK & DAM 52 AUX 1        | 1  | 11           | 185   | 1      | 13    | 65     | 5     | 19     | 58   | 1   | 14          | 60  | 213               | 148656           | 604.2              | 3295             |
| CANNELTON LOCK & DAM       | 1  | 22           | 60    | 1      | 8     | 35     | 5     | 11     | 50   | 1   | 8           | 30  | 775               | 71602            | 58.3               | 1572             |
| CANNELTON LOCK & DAM AUX   | 1  | 13           | 60    | 1      | 8     | 30     | 5     | 12     | 50   | 1   | 13          | 55  | 51                | 22057            | 298.0              | 1140             |
| NEWBURGH LOCK & DAM        | i  | 16           | 60    | 1      | 9     | 30     | 5     | 7      | 22   | 1   | 12          | 38  | 754               | 39818            | 28.1               | 326              |
| NEWBURGH LOCK & DAM AUX 1  | 1  | 8            | 31    | 1      | 3     | 20     | 5     | 7      | 13   | 1   | 5           | 25  | 12                | 211              | 1.5                | 51               |
| UNIONTOWN LOCK & DAM       | 1  | 18           | 130   | 1      | 8     | 30     | 5     | 8      | 60   | 1   | 7           | 47  | 993               | 78250            | 47.7               | 590              |
| UNIONTOWN LOCK & DAM AUX 1 | 1  | 5            | 50    | 1      | 2     | 29     | 5     | 9      | 20   | 1   | 2           | 32  | 9                 | 152              | 2.0                | 33               |

| EROC<br>H2 | DISTRICT NAME<br>LOUISVILLE |     |              |     | VISION<br>IO RIV |      |    |   |                          |    |              | 10/8          | 35  | DM | ONTHS REPO                   |                                  | 12/                               | '85                        |
|------------|-----------------------------|-----|--------------|-----|------------------|------|----|---|--------------------------|----|--------------|---------------|-----|----|------------------------------|----------------------------------|-----------------------------------|----------------------------|
|            |                             | HIN | APPRO<br>AVG |     | : HIN            | ENTR | RY |   | IG TIME<br>CHAMBE<br>AVG | R  | (.)<br>: MIN | EXIT<br>I AVG | HAX | :  | ALL TIMES<br>DELAYED<br>TOMS | EXPRESS<br>DELAY<br>TIME<br>TOWS | SED IN MI<br>DELAY<br>AVG<br>TOWS | INUTES DELAY HAX (ALL VSL) |
|            | OHIO RIVER                  |     |              |     |                  |      |    |   |                          |    |              |               |     |    |                              |                                  |                                   |                            |
| SMITHLAND  | D LOCK & DAH                | 1   | 16           | 90  | 1                | 10   | 70 | 1 | 9                        | 55 | 2            | 9             | 60  |    | 196                          | 11074                            | 10.8                              | 670                        |
| SHITHLAND  | D LOCK & DAN AUX 1          | 1   | 13           | 100 | 1                | 9    | 30 | 5 | 9                        | 30 | 2            | . 8           | 30  |    | 148                          | 4805                             | 5.0                               | 535                        |

| EROC DISTRI      | ICT NAME DIVISION NAME       | HONTHS REPORTED          | )     |
|------------------|------------------------------|--------------------------|-------|
| H3 HASHV         |                              | 10/85 11/85              | 12/85 |
| RIVER            | LCODE-LOCK NAME              | LEN/WID/DRAFT (FT/FT/FT) |       |
| CLINCH RIVER     | 11-HELTON HILL LOCK          | 0400/0075/11.0           |       |
| CUMBERLAND RIVER | 21-BARKLEY LOCK              | 0800/0110/11.0           |       |
|                  | 22-CHEATHAM LOCK             | 0800/0110/11.0           |       |
|                  | 23-CORDELL HULL LOCK         | 0400/0084/11.0           |       |
|                  | 24-OLD HICKORY LOCK          | 0400/0084/11.0           |       |
| TENNESSEE RIVER  | 01-KENTUCKY LOCK             | 0600/0110/11.0           |       |
|                  | 02-PICKWICK LANDING LOCK     | 1000/0110/11.0           |       |
|                  | 02-PICKHICK LANDING LOCK AUX | 0600/0110/11.0           |       |
|                  | 03-WILSON LOCK               | 0600/0110/11.0           |       |
|                  | 03-WILSON LOCK AUX           | 0292/0060/11.0           |       |
|                  | 04-gen Jos Wheeler Lock      | 0600/0110/11.0           |       |
|                  | 04-gen jos Wheeler LK aux1   | 0400/0060/11.0           |       |
|                  | 05-GUNTERSVILLE LOCK         | 0600/0110/11.0           |       |
|                  | 05-GUNTERSVILLE LOCK AUX 1   | 0360/0060/11.0           |       |
|                  | 06-NICKAJAC LOCK             | 0600/0119/11.0           |       |
|                  | 07-CHICKAMAUGA LOCK          | 0360/0060/11.0           |       |
|                  | 08-HATTS BAR LOCK            | 0360/0060/11.0           |       |
|                  | 09-FORT LOUDON LOCK          | 0360/0060/11.0           |       |

TABLE 2

| EROC      | DISTRICT NAME    |     | DIV   | ISION NAME     |        |                |           |                 | HC   | INTHS REP | ORTED |           |                    |
|-----------|------------------|-----|-------|----------------|--------|----------------|-----------|-----------------|------|-----------|-------|-----------|--------------------|
| H3        | NASHVILLE        |     |       |                |        |                |           | 10/8            |      | 11/8      |       |           | ?/85<br>           |
| RIVER/LO  | CK NAME          |     |       | VESSL<br>OTHER |        | BARGS<br>Empty |           | BARGES<br>TOTAL |      | RECRTN    |       | TOTAL     | TONNAGE<br>(KTONS) |
| *         | CLINCH RIVER     |     |       |                |        | ****           | - <b></b> |                 |      |           |       |           |                    |
| MEI TON U | ILL LOCK         | *** | UNI A | FIRST AND      | CELUND | MUNTUC         | DEDNOTEN  |                 |      |           |       |           |                    |
|           | STATISTICS       | 1   |       |                | SECURD |                | 1         | 3               | 1    | 4         | 4     | 0         | 0                  |
|           | STATISTICS       |     | 2     |                |        |                | i         | 2               |      | 2         | 4     | 7         | 0                  |
| TOTAL     | J.111207200      | 2   | 7     | ŏ              | 9      | 3              | 2         | 5               | 2    | 6         | 8     | 16        | Ŏ                  |
|           | CUMBERLAND RIVER |     |       |                |        |                |           |                 |      |           |       |           |                    |
| BARKLEY 1 | LOCK             | IIX | ONLY  | FIRST AND      | SECOND | HONTHS         | REPORTED  |                 |      |           |       |           |                    |
| UPBOUND   | STATISTICS       | 45  | 35    | 2              | 82     | 20             | 201       | 221             | 47   | 30        | 0     | <i>77</i> | 309                |
| DNBOUND   | STATISTICS       | 88  | 16    | 1              | 85     | 419            | 21        | 440             | 78   | 10        | 1     | 89        | 27                 |
| TOTAL     |                  | 113 | 51    | 3              | 167    | 439            | 222       | 661             | 125  | 40        | 1     | 166       | 336                |
| CHEATHAM  | LOCK             | XXX | ONLY  | FIRST AND      | SECOND | HONTHS         | REPORTED  |                 |      |           |       |           |                    |
|           | STATISTICS       | 98  |       | 0              |        | 28             | 467       | 495             | 102  | 34        | 3     | 139       | 749                |
|           | STATISTICS       | 95  |       |                |        |                | 54        | 525             | 99   | 31        | 2     |           | 69                 |
| TOTAL     |                  | 193 | 75    | 1              | 269    | 499            | 521       | 1020            | 201  | 65        | 5     | 271       | 818                |
|           | HULL LOCK        |     |       | FIRST AND      |        | HONTHS         | REPORTED  |                 |      |           |       |           |                    |
|           | STATISTICS       | 4   | 3     | 3              | 10     | 16             | . 0       | 16              | 10   | _         | 3     | 16        | 0                  |
|           | STATISTICS       | 7   |       |                |        | 0              | 17<br>17  |                 | 7    | 3         | 2     | 12        | 24                 |
| TOTAL     |                  | 11  | 6     | 3              | 20     | 16             | 1/        | 33              | 17   | 6         | 5     | 28        | 24                 |
| OLD HICK  | ORY LOCK         | XXX | ONLY  | FIRST AND      | SECOND | HONTHS         | REPORTED  |                 |      |           |       |           |                    |
| UPBOUND   | STATISTICS       | 23  | 144   | 6              | 173    | 3              | 37        | 40              | 29   | 95        | 4     | 128       | 61                 |
| DNBOUND   | STATISTICS       | 21  |       | 8              |        |                |           | 40              | 30   | 101       | 2     |           | 7                  |
| TOTAL     |                  | 44  | 292   | 14             | 350    | 39             | 41        | 80              | 59   | 196       | 6     | 261       | 68                 |
|           | TENNESSEE RIVER  |     |       |                |        |                |           |                 |      |           |       |           |                    |
| KENTUCKY  | LOCK             | XXX | ONLY  | FIRST AND      | SECOND | MONTHS         | REPORTED  |                 |      |           |       |           |                    |
|           | STATISTICS       | 326 | 145   | 42             | 513    | 708            | 2238      | 2946            | 488  | 119       | 5     | 612       | 3313               |
|           | STATISTICS       | 323 | 11    | 44             | 378    | 1831           | 1155      | 2986            | 519  | 14        | 5     | 538       | 1622               |
| TOTAL     |                  | 649 | 156   | 86             | 891    | 2539           | 3393      | 5932            | 1007 | 133       | 10    | 1150      | 4936               |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

DISTRICT NAME EROC DIVISION NAME HONTHS REPORTED OHTO RIVER 10/85 11/85 12/85 RIVER/LOCK NAME TOWS VESSL VESSL VESSL BARGS BARGES LCKGES LCKGES LCKGES TOWNAGE RECRTN OTHER TOTAL EMPTY FULL TOTAL COMMER RECRTN OTHER TOTAL (KTONS) (NAV, OPN, ETC) TENNESSEE RIVER PICKWICK LANDING LOCK 187 \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED UPBOUND STATISTICS 203 14 404 56 1678 1734 217 137 2394 1878 260 211 21 7 DNBOUND STATISTICS 239 1569 309 20 283 442 157 7 224 641 TOTAL 398 21 643 1625 1987 3612 477 2836 PICKHICK LANDING LOCK AUX \*\*\* NO DATA RECORDED FOR THIS LOCK WILSON LOCK \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED 93 74 46 213 156 520 676 144 66 UPBOUND STATISTICS 10 220 752 DNBOUND STATISTICS 78 32 210 340 298 638 144 69 100 3 216 414 193 152 78 423 496 818 1314 288 135 TOTAL 13 436 1166 WILSON LOCK AUX \*\*\* NO DATA RECORDED FOR THIS LOCK \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED GEN JOS WHEELER LOCK 67 64 UPROUND STATISTICS 23 3 93 114 389 503 91 120 575 DNBOUND STATISTICS 19 250 4 87 231 481 91 23 118 327 42 7 TOTAL 131 180 364 620 984 182 48 238 903 GEN JOS WHEELER LK AUX1 \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED UPBOUND STATISTICS 19 45 2 66 31 100 131 48 14 56 1 71 54 49 103 27 78 132 6 136 5 . DNBOUND STATISTICS 27 85 117 64 33 TOTAL 101 3 137 85 149 234 75 249 11 200 GUNTERSVILLE LOCK \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED 87 174 0 261 219 395 614 101 UPBOUND STATISTICS 133 238 133 144 580 185 359 4 276 103 DNEOUND STATISTICS 87 337 262 599 3 250 453 TOTAL 174 4 537 481 732 1213 204 277 7 488 1033 AUX 1 XXX ONLY FIRST AND SECOND MONTHS REPORTED GUNTERSVILLE LOCK UPBOUND STATISTICS 0 20 0 20 0 0 0 0 19 0 19 0 15 15 14 DMBOUND STATISTICS 0 0 0 0 0 0 14 ٥ 35 ¢ 35 TOTAL 0 0 0 0 33 33 NICKAJAC LOCK \*\*\* ONLY FIRST AND SECOND MONTHS REPORTED 98 118 5 221 262 409 671 117 UPBOUND STATISTICS 
 98
 118
 5
 221
 262
 409
 671
 117
 83
 2
 202

 99
 134
 8
 241
 329
 329
 658
 122
 83
 1
 206

 197
 252
 13
 462
 591
 738
 1329
 239
 166
 3
 408
 83 202 540 DNEGUND STATISTICS 455 TOTAL 996

TABLE 2

| EROC<br>H3 | DISTRICT NAME<br>NASHVILLE |     |                 | ISION NAME<br>O RIVER |                |                |               | 10/8            |                  | NTHS REF                 |                           | 12                     | 2/85               |
|------------|----------------------------|-----|-----------------|-----------------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|---------------------------|------------------------|--------------------|
|            |                            |     |                 |                       |                |                |               |                 | -                |                          |                           |                        |                    |
| RIVER/LOC  | CK NAME.                   |     | VESSL<br>RECRTN | VESSL<br>OTHER        | VESSL<br>TOTAL | BARGS<br>Enpty | BARGS<br>FULL | BARGES<br>Total | LCKGES<br>Commer | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER<br>OPN, E | LCKGES<br>Total<br>TC) | TONNAGE<br>(KTONS) |
|            | TENNESSEE RIVER            |     |                 |                       |                |                |               |                 |                  |                          |                           |                        |                    |
| CHICKAMAU  | IGA LOCK                   | III | ONLY            | FIRST AND             | SECOND         | HONTHS         | REPORTED      |                 |                  |                          |                           |                        |                    |
| UPBOUND    | STATISTICS                 | 51  | 552             | 0                     | 603            | 67             | 134           | 201             | 91               | 261                      | 3                         | 355                    | 194                |
| DNBOUND    | STATISTICS                 | 47  | 550             | 6                     | 603            | 105            | 98            | 203             | 91               | 284                      | 10                        | 385                    | 140                |
| TOTAL      |                            | 98  | 1102            | 6                     | 1206           | 172            | 232           | 404             | 182              | 545                      | 13                        | 740                    | 335                |
| WATTS BAR  | R LOCK                     | XXX | ONLY            | FIRST AND             | SECOND         | HONTHS         | REPORTED      |                 |                  |                          |                           |                        |                    |
| UPBOUND    | STATISTICS                 | 33  | 159             | 1                     | 193            | 74             | 43            | 117             | 53               | 171                      | 11                        | 235                    | 84                 |
| DNBOUND    | STATISTICS                 | 32  | 158             | 0                     | 190            | 22             | 89            | 111             | 51               | 174                      | 11                        | 236                    | 124                |
| TOTAL      |                            | 65  | 317             | 1                     | 383            | 96             | 132           | 228             | 104              | 345                      | 22                        | 471                    | 209                |
| FORT LOUD  | OON LOCK                   | XXX |                 | •                     |                |                |               |                 |                  |                          |                           |                        |                    |
| UPBOUND    | STATISTICS                 | 23  | 123             | 1                     | 147            | 11             | 38            | 49              | 34               | 86                       | 2                         | 122                    | <i>77</i>          |
| DNBOUND    | STATISTICS                 | 21  | 123             | 1                     | 145            | 31             | . 19          | 50              | 32               | 89                       | 2                         | 123                    | 26                 |
| TOTAL      |                            | 44  | 246             | 2                     | 292            | 42             | 57            | 99              | 66               | 175                      | 4                         | 245                    | 104                |

# PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR WATER RESOURCES

EROC CYSTRICT NAME DIVISION NAME MONTHS REPORTED

H3 kashville Ohio River 10/85 11/85 12/85

|                           |        |        |       | •        |     |       |       |         |       |     |       |         |     | AII TTM         | S EXPRESS     | SED TN MI    | INITES       |
|---------------------------|--------|--------|-------|----------|-----|-------|-------|---------|-------|-----|-------|---------|-----|-----------------|---------------|--------------|--------------|
|                           |        |        | APPRI |          |     | ENTRY |       | C       | HAMBE | :R  |       | EXIT    |     | DELAYED<br>TONS | DELAY<br>TIME | DELAY<br>AVG | DELAY<br>MAX |
|                           | H:<br> | IN<br> | AVG   | MAX : H  | IN  | AVG   | HAX : | HIN<br> | AVG   | MAX | : MIN | AVG<br> | MAX |                 | TONS          | TONS         | (ALL VSLS)   |
| CLINCH RIVER              |        |        |       |          |     |       |       |         |       |     |       |         |     |                 |               |              |              |
| MELTON HILL LOCK          |        | i      | 7     | 25       | 1   | 1     | 8     | 7       | 13    | 21  | 1     | 2       | 11  | 0               | 0             | 0.0          | 19           |
| CUMBERLAND REVER          |        |        |       |          |     |       |       |         |       |     |       |         |     |                 |               |              |              |
| BARKLEY LOCK              |        | 1      | 12    | 44       | 1   | 8     | 25    | 6       | 16    | 40  | 1     | 7       | 33  | 14              | 1005          | 8.8          | 345          |
| CHEATHAM LOCK             |        | 1      | 8     | 32       | 2   | 10    | 39    | 10      | 17    | 27  | 2     | 8       | 59  | 24              | 1283          | 6.6          | 600          |
| CORDELL HULL LOCK         |        | 2      | 6     | 15       | 2   | 6     | 20    | 14      | 18    | 20  | 2     | 8       | 20  | 0               | 0             | 0.0          | 0            |
| OLD HICKORY LOCK          |        | 1      | 2     | 24       | 1   | 4     | 26    | 4       | 17    | 31  | 1     | 3       | 31  | 5               | 337           | 7.6          | 216          |
| TENNESSEE RIVER           |        |        |       |          |     |       |       |         |       |     |       |         |     |                 |               |              |              |
| KENTUCKY LOCK             |        | 1      | 7     | 66       | 1   | 12    | 65    | 7       | 17    | 41  | 1     | 15      | 73  | 541             | 165291        | 254.6        | 2170         |
| PICKHICK LANDING LOCK     |        | 1      | 11    | 74       | 1   | 13    | 64    | 8       | 20    | 53  | 1     | 15      | 59  | 211             | 24619         | 61.8         | 834          |
| PICKWICK LANDING LOCK AUX | i      | NO     | DATA  | RECORDED | FOR | THIS  | LOCK  |         |       |     |       |         |     |                 |               |              |              |
| WILSON LOCK               |        | 1      | 10    | 50       | 1   | 10    | 37    | 6       | 21    | 43  | 1     | 11      | 58  | 54              | 4036          | 20.9         | 218          |
| HILSON LOCK AUX           | į      | NO     | DATA  | RECORDED | FOF | THIS  | LOCK  |         |       |     |       |         |     |                 |               |              |              |
| GEN JOS WHEELER LOCK      |        | 1      | 14    | 59       | 2   | 12    | 42    | 10      | 14    | 29  | 2     | 15      | 47  | 38              | 4151          | 31.6         | 973          |
| GEN JOS WHEELER LK A      | UX     | 1      | 11    | 86       | 1   | 7     | 28    | 6       | 12    | 27  | 1     | 13      | 122 | 23              | 14370         | 435.4        | 1145         |
| GUNTERSVILLE LOCK         |        | 1      | 9     | 412      | 1   | 8     | 65    | 6       | 14    | 36  | 1     | 9       | 45  | 37              | 3158          | 18.1         | 1440         |

|                | ISTRICT NAME | E      |                |     | IVISION<br>HIO RIV | VER  |    |                    |       |    |   | 10/8        | _   | MONTHS REPO            |                                    | 12/                               | <b>8</b> 5                          |
|----------------|--------------|--------|----------------|-----|--------------------|------|----|--------------------|-------|----|---|-------------|-----|------------------------|------------------------------------|-----------------------------------|-------------------------------------|
| <del></del>    |              | IN<br> | APPRI<br>N AVG |     | : HIN              | ENTR | RY | ESSING<br>C<br>HIN | HAMBE | R  |   | EXIT<br>AVG | MAX | ALL TIME: DELAYED TOWS | S EXPRESS<br>DELAY<br>TIME<br>TOWS | SED IN HI<br>DELAY<br>AVG<br>TOHS | NUTES<br>DELAY<br>MAX<br>(ALL VSLS) |
| TENNE          | SSEE RIVER   |        |                |     |                    |      |    |                    |       |    |   |             |     |                        |                                    |                                   |                                     |
| CUNTERSVILLE L | OCK AL       | UX     | 1 7            | 16  | 2                  | 3    | 8  | 9                  | 12    | 22 | 1 | 3           | 6   | 0                      | 0                                  | 0.0                               | 35                                  |
| NICKAJAC LOCK  |              |        | 1 8            | 37  | 1                  | 9    | 37 | 1                  | 14    | 74 | 1 | 10          | 74  | 43                     | 1923                               | 9.7                               | 152                                 |
| CHICKAMAUGA LO | CK           |        | 1 4            | 121 | 1                  | 6    | 40 | 9                  | 12    | 34 | 1 | 6           | 50  | 36                     | 5816                               | 59.3                              | 430                                 |
| HATTS BAR LOCK | i            |        | 1 6            | 50  | i                  | 3    | 23 | 6                  | 15    | 36 | 1 | 5           | 112 | 14                     | 1563                               | 24.0                              | 402                                 |
| FORT LOUDON LO | CK           |        | 1 10           | 52  | 1                  | 3    | 16 | 2                  | 20    | 39 | 1 | 5           | 33  | 6                      | 371                                | 8.4                               | 163                                 |

| EROC D          | ISTRICT NAME         | DIVISION NAME          | H             | ONTHS REPORTED |       |
|-----------------|----------------------|------------------------|---------------|----------------|-------|
| H4 P:           | ITTSBURGH            | OHIG RIVER             | 10/85         | 11/85          | 12/85 |
| RIVER           | LCODE-LOCK           | NAME                   | LEN/HID/DRAF  | T (FT/FT/FT)   |       |
| ALLEGHENY RIVES |                      |                        | 0360/0056/13. |                |       |
|                 | 43-LOCK &            |                        | 0360/0056/13. | 0              |       |
|                 | 44-LOCK &            |                        | 0360/0056/13. | 0              |       |
|                 | 45-LOCK &            |                        | 0360/0056/13. |                |       |
|                 | 46-LOCK &            | DAN 6                  | 0360/0056/13. | 0              |       |
|                 | 47-LOCK &            |                        | 0360/0056/13. | 0              |       |
|                 | 48-LOCK &            | DAN 8                  | 0360/0056/13. | 0              |       |
|                 | 49-LOCK &            | DAM 9                  | 0360/0056/13  | 0              |       |
| MONONGAHELA RIV |                      |                        | 0720/0110/13. | 0              |       |
|                 | 22-LOCK &            | DAM 2 AUX 1            | 0360/0056/13  | 0              |       |
|                 | 23-LOCK &            | DAM 3                  | 0720/0056/13. | 0              |       |
|                 | 23-LOCK &            | DAH 3 AUXILIARY 1      | 0360/0056/13. | 0              |       |
|                 | 24-LOCK &            | DAN 4                  | 0720/0056/13. | 0              |       |
|                 | 24-LOCK &            | DAH 4 AUXILIARY 1      | 0360/0056/13. | 0              |       |
|                 | 25-MAXWELL           | LOCK & DAN             | 0720/0084/13. | 0              |       |
|                 | 25-HAXWELL           | LOCK & DAN AUX 1       | 0720/0084/13. | 0              |       |
|                 | 27-LOCK & (          | DAM 7                  | 0360/0056/13  | 0              |       |
|                 | 28-LOCK & (          | DAM 8                  | 0360/0056/13. | 0              |       |
|                 | 29-HORGANT           | DWN LOCK & DAM         | 0600/0084/13  | 0              |       |
|                 | 30-HILDEBR           | AND LOCK & DAM         | 0600/0084/13. | 0              |       |
|                 | 31-OPEKISK           | A LOCK & DAM           | 0600/0084/13+ | 0              |       |
| OHIO RIVER      | 01-EMSNORT           | H LOCK & DAM           | 0600/0110/13. | 0              |       |
|                 | 01-EHSHORT           | H LOCK & DAM AUX 1     | 0360/0056/13. | 0 .            | •     |
|                 | 02-DASHIEL           | DS LOCK & DAM          | 0600/0110/13. | 0              |       |
|                 | 02-DASHIEL           | DS LOCK & DAH AUX 1    | 0360/0056/13+ | 0              |       |
|                 | 03-HONTGON           | ERY LOCK & DAM         | 0600/0110/13. | 0              |       |
|                 | 03- <b>Hontgoh</b> i | ERY LOCK & DAM AUX 1   | 0360/0056/13. | 0              |       |
|                 | 04-NEH CUM           | BERLAND LOCK & DAM     | 1200/0110/13. | · ·            |       |
|                 | 04-NEN CUNI          | BERLAND LK & DAM AUX 1 | 0600/0110/13. | 0              |       |
|                 | 05-PIKE IS           | LAND LOCK & DAM        | 1200/0110/13. | 0              |       |
|                 | 05-PIKE IS           | LAND LOCK & DAM AUX 1  | 0600/0110/13. | 0              |       |
|                 | 71-HANNIBA           | L LOCKS & DAM          | 1200/0110/13. | 0              |       |
|                 | 71-HANNIBA           | L LOCKS & DAM AUX 1    | 0600/0110/13. | 0              |       |

TABLE 2

SYSTEM SESSESSI ISSUED ACCORD

| EROC<br>H4 | DISTRICT NAME<br>PITTSBURGH |      |                 | SION NAM       | E<br>          |                 |               | 10/8            |            | NTHS REP |     | 12    | :/85<br>           |
|------------|-----------------------------|------|-----------------|----------------|----------------|-----------------|---------------|-----------------|------------|----------|-----|-------|--------------------|
| RIVER/LOCK | ( NAME                      | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY  | BARGS<br>FULL | BARGES<br>TOTAL |            | RECRIN   |     | TOTAL | Tonnage<br>(Ktons) |
| A          | ALLEGHENY RIVER             |      |                 |                |                |                 |               |                 |            |          |     |       |                    |
| LOCK & DAM | 1 2                         | X    | i X             |                |                |                 |               |                 |            |          |     |       |                    |
| upbound s  | STATISTICS                  | 208  | 200             | 13             | 421            | 382             | 255           | 637             | 303        | 162      | 2   | 467   | 306                |
| DNBOUND S  | STATISTICS                  | 209  | 196             | 14             | 419            | 276             | 381           | 657             | 314        | 150      | 2   | 466   | 213                |
| TOTAL      |                             | 417  | 396             | 27             | 840            | 658             | 636           | 1294            | 617        | 312      | 4   | 933   | 520                |
| LOCK & DAN | 13                          | X    | KX.             |                |                |                 |               |                 |            |          |     |       |                    |
| UPBOUND S  | STATISTICS                  | 211  | 91              | 17             | 319            | 393             | 260           | 653             | 322        | 87       | 5   | 414   | 323                |
| DNBOUND S  | STATISTICS                  | 211  | 102             | 20             | 333            | 285             | 380           | 665             | 332        | 83       | 4   | 419   | 211                |
| TOTAL      |                             | 422  | 193             | 37             | 652            | 678             | 640           | 1318            | 654        | 170      | 9   | 833   | 535                |
| LOCK & DAM | 1 4                         | XX   | K.X.            | •              |                |                 |               |                 |            |          |     |       |                    |
| upbound s  | STATISTICS                  | 234  | 86              | 25             | 345            | 659             | 104           | 763             | 320        | 70       | 1   | 391   | 129                |
| DNBOUND S  | STATISTICS                  | 244  | 97              | 16             | 357            | 100             | 680           | 780             | 318        | 74       | 1   | 393   | 337                |
| TOTAL      |                             | 478  | 183             | 41             | 702            | 75 <del>9</del> | 784           | 1543            | <b>638</b> | 144      | 2   | 784   | 467                |
| LOCK & DAM | i 5                         | XX   | IX.             |                |                |                 |               |                 |            |          |     | 4     |                    |
| UPBOUND S  |                             | 176  | <i>7</i> 5      | 6              | 257            | 616             | 16            | 632             | 193        | 62       | 1   | 256   | 8                  |
| DNBOUND S  | TATISTICS                   | 181  | <i>77</i>       | 4              | 262            | 24              | 621           | 645             | 194        | 56       | 0   | 250   | 268                |
| TOTAL      |                             | 357  | 152             | 10             | 519            | 640             | 637           | 1277            | 387        | 118      | 1   | 506   | 276                |
| LOCK & DAM | i <b>6</b>                  | XX   | IX.             |                |                |                 |               |                 |            |          |     |       |                    |
| UPBOUND S  | TATISTICS                   | 170  | 44              | 10             | 224            | 550             | 10            | 560             | 185        | 27       | . 2 | 214   | 5                  |
| DNBOUND S  | TATISTICS                   | 177  | 44              | 4              | 225            | 3 <del>9</del>  | 535           | 574             | 187        | 24       | 1   | 212   | 228                |
| TOTAL      |                             | 347  | 88              | 14             | 449            | 589             | 545           | 1134            | 372        | 51       | 3   | 426   | 233                |
| LOCK & DAM |                             | IX   | IX.             |                |                |                 |               |                 |            |          |     |       |                    |
| UPBOUND S  | TATISTICS                   | 12   | 45              | 3              | 60             | 16              | 2             | 18              | 16         | 26       | 1   | 43    | 2                  |
| DNBOUND ST | TATISTICS                   | 14   | 39              | 1              | 54             | 9               | 18            | 27              | 17         | 25       | 0   | 42    | 7                  |
| TOTAL      |                             | 26   | 84              | 4              | 114            | 25              | 20            | 45              | 33         | 51       | 1   | 85    | 9                  |
| LOCK & DAM | 8                           | 11   | X               |                |                |                 |               |                 |            |          |     |       |                    |
| UPBOUND ST | TATISTICS                   | 98   | 26              | 3              | 127            | 98              | 0             | 98              | 106        | 21       | 1   | 128   | 0                  |
| DNEOUND ST | TATISTICS                   | 103  | 28              | 1              | 132            | 2               | 101           | 103             | 109        | 20       | 0   | 129   | 161                |
| TOTAL      |                             | 201  | 54              | 4              | 259            | 100             | 101           | 201             | 215        | 41       | 1   | 257   | 151                |
| LOCK & DAM | 9                           | XX   | x ONLY          | IRST HON       | ITH REPRO      | TED             |               |                 |            |          |     |       |                    |
| UPBOUND ST |                             | 0    | 23              | 0              | 23             | 0               | 0             | 0               | 5          | 19       | 0   | 24    | 0                  |
| DNBOUND ST | TATISTICS                   | 0    | 30              | 0              | 30             | 0               | 0             | 0               | 5          | 18       | 0   | 23    | ن                  |
| TOTAL      |                             | 0    | 53              | 0              | 53             |                 |               | 0               | 10         |          |     | 47    |                    |

| EROC DISTRICT NA<br>H4 PITTSBURGH | ME<br>      |                 | ISION NAM<br>RIVER | 1E             |                |                       | 10/8            |             | NTHS REF |        | 12         | 2/85                            |
|-----------------------------------|-------------|-----------------|--------------------|----------------|----------------|-----------------------|-----------------|-------------|----------|--------|------------|---------------------------------|
| RIVER/LOCK NAME                   | TOHS        | VESSL<br>RECRTN | VESSL<br>OTHER     | VESSL<br>TOTAL | BARGS<br>EMPTY | Bargs<br>Full         | BARGES<br>Total |             | RECRTN   |        | TOTAL      | To <del>nnag</del> e<br>(KTONS) |
| HONONGAHELA RIV                   | ER          |                 |                    |                |                |                       |                 |             |          |        |            |                                 |
| LOCK & DAN 2                      | XX          | x               |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 443         | 6               | 30                 | 479            | 1579           | 861                   | 2440            | 472         | 5        | 4      | 481        | 1099                            |
| DNBOUND STATISTICS                | 423         | 6               | 32                 | 461            | 501            | 1876                  | 2377            | 465         | 6        | 5      | 476        | 2035                            |
| TOTAL                             | 866         | 12              | 62                 | 940            | 2080           | 2737                  | 4817            | 937         | 11       | 9      | 957        | 3135                            |
| LOCK & DAM 2 AUX 1                | XX          |                 |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 82          | <b>-</b> 51     | 36                 | 169            | 29             | 98                    | 127             | 118         | 46       | 3      | 167        | 75                              |
| DNBOUND STATISTICS                | 81          | 47              | 45                 | 173            | 89             | 26                    | 115             | 127         | 39       | 4      | 170        | 29                              |
| TOTAL                             | 163         | 98              | 81                 | 342            | 118            | 124                   | 242             | 245         | 85       | 7      | 337        | 104                             |
|                                   |             |                 |                    |                |                |                       |                 |             |          |        |            |                                 |
| LOCK & DAN 3                      | 11          |                 |                    |                |                |                       |                 |             | _        |        |            |                                 |
| UPBOUND STATISTICS                | 586         | 1               | 29                 | 616            | 2583           | 335                   | 2918            | 607         | 0        | 1      | 608        | 395                             |
| DMBOUND STATISTICS TOTAL          | 609<br>1195 | 0<br>1          | 30<br>59           | 639<br>1255    | 239<br>2822    | 2657<br>2 <b>9</b> 92 | 2896<br>5814    | 630<br>1237 | 0        | 4<br>5 | 634        | 2719                            |
| TOTAL                             | 1173        | •               | J7                 | 1233           | נטבב           | 2772                  | 7014            | 123/        | U        | ๋      | 1242       | 3115                            |
| LDCK & DAM 3 AUXILIARY 1          | XX          | E               |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTIUS                | 72          | 27              | 139                | 238            | 62             | 38                    | 100             | 206         | 26       | 1      | 233        | 37                              |
| DNBOUND STATISTICS                | 91          | 30              | 100                | 221            | 52             | 99                    | 151             | 187         | 25       | 4      | 216        | 101                             |
| TOTAL                             | 163         | 57              | 239                | 459            | 114            | 137                   | 251             | 393         | 51       | 5      | 449        | 139                             |
| LOCK & DAN 4                      | XX:         | -               |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 438         |                 | 5                  | 443            | 2242           | 196                   | 2438            | 465         | 0        | 2      | 467        | 208                             |
| DNBOUND STATISTICS                | 434         |                 | 5                  | 439            | 118            | 2278                  | 2396            | 492         | ŏ        | 2      | 494        | 2427                            |
| TOTAL                             | 872         | 0               | 10                 | 882            | 2360           | 2474                  | 4834            | 957         | Ō        | 4      | 961        | 2635                            |
|                                   |             |                 |                    |                |                |                       |                 |             |          |        |            |                                 |
| LOCK & DAM 4 AUXILIARY 1          |             |                 |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 38          | 28              | 37                 | 103            | 54             | 10                    | 64              | 77          | 27       | 3      | 107        | 10                              |
| DNBOUND STATISTICS<br>TOTAL       | 28<br>66    | 30<br>58        | 57<br>94           | 115<br>218     | 18<br>72       | 29<br>39              | 47              | 86          | 26       | 5      | 117        | 31                              |
| TOTAL                             | 00          | Jo              | 74                 | 719            | 12             | 37                    | 111             | 163         | 53       | 8      | 224        | 42                              |
| MAXMELL LOCK & DAM                | XX          | 3               |                    |                |                |                       |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 317         | 36              | 7                  | 360            | 1625           | 168                   | 1793            | 323         | 30       | 1      | 354        | 179                             |
| DNBOUND STATISTICS                | 155         | 31              | 6                  | 192            | 41             | 781                   | 822             | 162         | 14       | 2      | 178        | 803                             |
| TOTAL                             | 472         | 67              | 13                 | 552            | 1666           | 949                   | 2615            | 485         | 44       | 3      | 532        | 982                             |
| MAXHELL LOCK & DAM AUX 1          | rri         | י עוגע י        | TDOT AM            | י הבהטזור      | MONTUC C       | יבטטטיבט              |                 |             |          |        |            |                                 |
| UPBOUND STATISTICS                | 51          | UNLT 1<br>22    | -1K51 ANI<br>1     | SECOND<br>74   | 286            | 16                    | 302             | 52          | 11       | 0      | <b>.</b> 2 | 14                              |
| DNBOUND STATISTICS                | 209         | 35              | 4                  | 248            | 31             | 1215                  | 1246            | 211         | 15       | 0      | 63<br>226  | 16<br>1245                      |
| TOTAL                             | 260         | 57              | ,<br>5             | 322            | 317            | 1231                  | 1548            | 263         | 26       | 0      | 289        | 1751                            |
|                                   |             |                 |                    |                |                |                       |                 |             |          |        |            | -                               |

TABLE 2

| EROC<br>H4 | DISTRICT NAME<br>PITTSBURGH             |      | OHIO      | CSION NAM<br>O RIVER |                |       | **** | 10/8  | HC<br>B5 | ONTHS REF      |                  | 17         | 2/85                                    |
|------------|---|------|-----------|----------------------|----------------|-------|------|-------|----------|----------------|------------------|------------|---|
| RIVER/LOCK |   | TOHS |           | OTHER                | VESSL<br>TOTAL | EMPTY |      | TOTAL | COMMER   | RECRTN<br>(NAV | OTHER  J. OPN, E | TOTAL      | TO <del>nn</del> ag <u>e</u><br>(Ktons) |
|            | HONONGAHELA RIVER                       |      |           |                      |                |       |      |       |          |                |                  | ,          | ,                                       |
| LOCK & DAM | 4 7                                     | XX   | t X       |                      |                |       |      |       |          |                |                  |            |   |
|            | STATISTICS                              | 363  |           | 26                   | 405            | 1569  | 143  | 1712  | 680      | 21             | 7                | 708        | 163                                     |
|            | STATISTICS                              | 350  |           | 28                   | 393            | 37    | 1628 | 1665  | 675      | 16             | 9                |            | 1642                                    |
| TOTAL      | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | 713  | 31        | 54                   | 798            | 1606  | 1771 |       | 1355     |                | 16               | 1408       | 1805                                    |
| LOCK & DAN | 18                                      | XX   | łx        |                      |                |       |      |       |          |                |                  |            |   |
|            | STATISTICS                              | 321  | 12        | 19                   | 352            | 1314  | 142  | 1456  | 603      | 15             | 3                | 621        | 159                                     |
|            | STATISTICS                              | 310  | 9         | 28                   | 347            | 36    | 1374 | 1410  | 593      | 12             | 3                | 608        | 1388                                    |
| TOTAL      |   | 631  | 21        | 47                   | 699            | 1350  | 1516 |       | 1196     | 27             | 6                | 1229       | 1547                                    |
| MORGANTONE | N LOCK & DAN                            | XX   | IX.       |                      |                |       |      |       |          |                |                  |            |   |
| UPBOUND S  | STATISTICS                              | 77   | 10        | 12                   | 99             | 304   | 0    | 304   | 90       | 9              | 0                | 99         | 0                                       |
| DNBOUND S  | STATISTICS                              | 71   | 11        | 14                   | 96             | 1     | 286  | 287   | 85       | 10             | 2                | <b>9</b> 7 | 296                                     |
| TOTAL      |   | 148  | 21        | 26                   | 195            | 305   | 286  | 591   | 175      | 19             | 2                | 196        | 296                                     |
| HILDEBRAND | LOCK & DAM                              | XX   |           |                      |                |       |      |       |          |                |                  |            |   |
| UPBOUND S  | STATISTICS                              | 35   | 8         | 8                    | 51             | 157   | 0    | 157   | 43       | 7              | 0                | 50         | 0                                       |
| DNBOUND S  | STATISTICS                              | 36   | 15        | 5                    | 56             | 0     | 147  | 147   | 41       | 12             | 1                | 54         | 157                                     |
| TOTAL      |   | 71   | 23        | 13                   | 107            | 157   | 147  | 304   | 84       | 19             | 1                | 104        | 157                                     |
| OPEKISKA L | OCK & DAM                               | XX   | (X        |                      |                |       |      |       |          |                |                  |            |   |
| UPBOUND S  | STATISTICS                              | 18   |           | 5                    | 33             | 62    | 0    | 62    | 22       | 9              | 1                |            | 0                                       |
| DNBOUND S  | STATISTICS                              | 17   |           | 4                    | 32             | 1     | 57   | 58    | 21       | 10             | 1                | 32         | 57                                      |
| TOTAL      |   | 35   | 21        | 9                    | 65             | 63    | 57   | 120   | 43       | 19             | 2                | 64         | 57                                      |
| 0          | OHIO RTVER                              |      |           |                      |                |       |      |       |          |                |                  |            |   |
| ENSHORTH L | OCK & DAM                               | II   | ĭπ        |                      |                |       |      |       |          |                |                  |            |   |
| UPBOUND S  | STATISTICS                              | 473  | 2         | 27                   | 502            | 1196  | 1571 | 2767  | 551      | 1              | 4                | 556        | 1910                                    |
| DNBOUND S  | STATISTICS                              | 448  | 4         | 28                   | 480            | 1067  | 1607 | 2674  | 531      | 3              | 4                | 538        | 1825                                    |
| TOTAL      |   | 921  | 6         | 55                   | 982            | 2263  | 3178 | 5441  | 1082     | 4              | 8                | 1094       | 3735                                    |
| ENSHORTH L | OCK & DAM AUX 1                         | XX   | <b>IX</b> |                      |                |       |      |       |          |                |                  |            |   |
| UPBOUND S  | STATISTICS                              | 113  | 44        | 62                   | 219            | 61    | 92   | 153   | 194      | 34             | 7                | 235        | 96                                      |
| DNBOUND S  | STATISTICS                              | 121  | 67        | 84                   | 272            | 129   | 45   | 174   | 221      | 52             | 11               | 284        | 48                                      |
| TOTAL      |   | 234  | 111       | 146                  | 491            | 190   | 137  | 327   | 415      | 86             | 18               | 519        | 145                                     |

|                  | TRICT NAME<br>TSBURGH |      |                 | SION NAP       | E              |                |               | 10/8            |      | NTHS REP |     | 12    | :/ <b>85</b>       |
|------------------|-----------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------|----------|-----|-------|--------------------|
| RIVER/LOCK NAME  |                       | TONS | VESSL<br>Recrtn | VESSL<br>Other | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>FULL | BARGES<br>TOTAL |      | RECRTN   |     | TOTAL | TONNAGE<br>(KTONS) |
| OHIO RI          | VER                   |      |                 |                |                |                |               |                 |      |          |     |       |                    |
| DASHIELDS LOCK & | DAM                   | XX   | (X              |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  |                       | 431  | 1               | 17             | 449            | 1157           | 1775          | 2932            | 515  | 0        | 2   | 517   | 2085               |
| DNBOUND STATIST  |                       | 417  | 0               | 5              | 422            | 1297           | 1594          | 2891            | 491  | 0        | 2   | 493   | 1815               |
| TOTAL            |                       | 848  | 1               | 22             | 871            | 2454           | 3369          | 5823            | 1006 | 0        | 4   | 1010  | 3900               |
| DASHIELDS LOCK & | DAM AUX 1             | XX   | X.              |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  | ICS                   | 113  | 35              | 64             | 212            | 91             | 57            | 148             | 183  | 27       | 2   | 212   | 61                 |
| DNBOUND STATIST  | ICS                   | 103  | 45              | 101            | 249            | 66             | 72            | 138             | 206  | 37       | 2   | 245   | 69                 |
| TOTAL            |                       | 216  | 80              | 165            | 461            | 157            | 129           | 286             | 389  | 64       | 4   | 457   | 131                |
| MONTGOHERY LOCK  | & DAM                 | XI   | XX              |                | •              |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  | ICS                   | 446  | 0               | 29             | 475            | 1191           | 1942          | 3133            | 572  | 0        | 0   | 572   | 2439               |
| DNBOUND STATIST  | ICS                   | 436  | 1               | 27             | 464            | 1466           | 1597          | 3063            | 544  | 1        | 1   | 546   | 1839               |
| TOTAL            |                       | 882  | 1               | 56             | 939            | 2657           | 3539          | 6196            | 1116 | 1        | 1   | 1118  | 4279               |
| HONTGOHERY LOCK  | & DAM AUX 1           | XX   | (X              |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  | ICS                   | 66   | 30              | 64             | 160            | 47             | 32            | 79              | 133  | 25       | 2   | 160   | 32                 |
| DNBOUND STATIST  | ICS                   | 66   | 33              | 64             | 163            | 49             | 31            | 80              | 134  | 30       | 2   | 166   | 32                 |
| TOTAL            |                       | 132  | 63              | 128            | 323            | 96             | 63            | 159             | 267  | 55       | 4   | 326   | 65                 |
| NEH CUMBERLAND L | OCK & DAM             | XX   | (X              |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  |                       | 328  |                 | 13             | 341            | 320            | 2696          | 3016            | 332  | 0        | 0 - | 332   | 3860               |
| DNBOUND STATIST  | ICS                   | 286  | 2               | 7              | 295            | 1887           | 920           | 2807            | 289  | 2        | 0   | 291   | 1136               |
| TOTAL            |                       | 614  | 2               | 20             | 636            | 2207           | 3616          | 5823            | 621  | 2        | 0   | 623   | 4996               |
| NEW CUMBERLAND L |                       |      |                 |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  |                       | 133  | 24              | 46             | 203            | 163            | 295           | 458             | 183  | 21       | 1   | 205   | 302                |
| DNBOUND STATIST  | ICS                   | 154  | 33              | 57             | 244            | 362            | 126           | 488             | 211  | 31       | 1   | 243   | 146                |
| TOTAL            |                       | 287  | 57              | 103            | 447            | 525            | 421           | 946             | 394  | 52       | 2   | 448   | 448                |
| PIKE ISLAND LOCK |                       | X 1  |                 |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  |                       | 373  | 7               | 15             | 395            | 338            | 3305          | 3643            | 379  | 4        | 1   | 384   | 4700               |
| DNEOUND STATIST  | ICS                   | 344  | 7               | ζ              | 360            | 2255           | 1206          | 3461            | 351  | 5        | 0   | 356   | 1575               |
| TOTAL            |                       | 717  | 10              | 24             | 755            | 2593           | 4511          | 7104            | 730  | 9        | 1   | 740   | 6275               |
| PIKE ISLAND LOCK |                       |      | :x              |                |                |                |               |                 |      |          |     |       |                    |
| UPBOUND STATIST  |                       | 115  | 18              | 45             | 179            | 181            | 121           | 302             | 164  | 16       | 2   | 162   | 163                |
| DNEGUND STATIST  | ICS                   | 126  | 17              | 5:             | 191            | 211            | 161           | 372             | 182  | 11       | 3   | 196   | 168                |
| TOTAL            |                       | 241  | 32              | 97             | 370            | 392            | 282           | 674             | 346  | 27       | 5   | 378   | 332                |

TABLE 2

| EROC     | DISTRICT NAME           | DIVISION NAME |                 |                |                |                |               | HONTHS REPORTED |                  |                          |                 |                        |                    |  |
|----------|-------------------------|---------------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|-----------------|------------------------|--------------------|--|
| H4       | 4 PITTSBURGH OHIO RIVER |               |                 |                |                | 10/85          |               | 11/85           |                  | 12                       | 2/85<br>        |                        |                    |  |
| RIVER/LO | CK NAME                 | TONS          | VESSL<br>Recrtn | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>ENPTY | BARGS<br>FULL | BARGES<br>Total | LCKGES<br>Commer | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER | LCKGES<br>TOTAL<br>TC) | Tonnage<br>(Ktons) |  |
|          | OHIO RIVER              |               |                 |                |                |                |               |                 |                  |                          |                 |                        |                    |  |
| HANNIBAL | LOCKS & DAM             | KX            | IX.             |                |                |                |               |                 |                  |                          |                 |                        |                    |  |
| UPBOUND  | STATISTICS              | 381           | 1               | 12             | 394            | 881            | 3033          | 3914            | 393              | 0                        | 0               | 393                    | 4170               |  |
| DNBOUND  | STATISTICS              | 363           | 3               | 20             | 386            | 1684           | 2099          | 3783            | 384              | 2                        | 1               | 387                    | 2791               |  |
| TOTAL    |                         | 744           | 4               | 32             | 780            | 2565           | 5132          | 7697            | 777              | 2                        | 1               | 780                    | 6961               |  |
| HANNIBAL | LOCKS'& DAH AUX 1       | XX            | (X              |                |                |                |               |                 |                  |                          |                 |                        |                    |  |
| UPBOUND  | STATISTICS              | 54            | 12              | 15             | 81             | 45             | 82            | 127             | 71               | 10                       | 5               | 86                     | 62                 |  |
| DNBOUND  | STATISTICS              | 59            | 21              | 14             | 94             | 92             | 43            | 135             | 77               | 19                       | 3               | 99                     | 28                 |  |
| TOTAL    |                         | 113           | 33              | 29             | 175            | 137            | 125           | 262             | 148              | 29                       | 8               | 185                    | 91                 |  |

| EROC<br>H4   | DISTRICT NAME<br>PITTSBURGH |         |       |         | VISION<br>IO RIV |         |     |       |       |     |     | 10/8 | 35      | MONTHS REPO<br>11/85 |               | 12/          | 85<br>       |
|--------------|-----------------------------|---------|-------|---------|------------------|---------|-----|-------|-------|-----|-----|------|---------|----------------------|---------------|--------------|--------------|
|              |                             |         | APPRO |         |                  | ENTR    | Υ   |       | HAMBE | R   |     | EXIT |         | TONS                 | DELAY<br>TIME | DELAY<br>AVG | DELAY<br>Max |
| ·<br>!       |                             | MIN<br> | AVG   | MAX<br> | : HIN            | AVG<br> | MAX | : HIN | AVG   | MAX | HIN | AVG  | MAX<br> | :<br>                | TONS          | TONS         | (ALL VSLS)   |
| ALL          | LEGHENY RIVER               |         |       |         |                  |         |     |       |       |     |     |      |         |                      |               |              |              |
| LOCK & DAM 2 | 2                           | 1       | 5     | 35      | i                | 5       | 19  | 5     | 7     | 12  | 1   | 6    | 57      | 113                  | 5681          | 13.6         | 660          |
| LOCK & DAM 3 | 3                           | 1       | 7     | 45      | 1                | 4       | 24  | 5     | 8     | 45  | 1   | 6    | 73      | 106                  | 5278          | 12.5         | 235          |
| LOCK & DAN 4 | 4                           | 1       | 6     | 64      | 1                | 4       | 22  | 5     | 7     | 19  | 1   | 6    | 47      | 96                   | 2907          | 6.0          | 155          |
| LOCK & DAH S | 5                           | 1       | 6     | 20      | 1                | 4       | 15  | 5     | 8     | 10  | 1   | 4    | 20      | 39                   | 273           | 0.7          | 17           |
| LOCK & DAN 6 | 6                           | 2       | 4     | 8       | 3                | 4       | 5   | 5     | 7     | 8   | 1   | 4    | 10      | 29                   | 275           | 0.7          | 23           |
| LOCK & DAN 7 | 7                           | 2       | 3     | 10      | 1                | 3       | 5   | 5     | 7     | 8   | 1   | 3    | 8       | 2                    | 17            | 0.6          | 18           |
| LOCK & DAM 8 | 3                           | 1       | 5     | 15      | 1                | 4       | 5   | 5     | 8     | 18  | 1   | 4    | 5       | 6                    | 56            | 0.2          | 18           |
| LOCK & DAH 9 | 7                           | 1       | 3     | 10      | 1                | 1       | 6   | 7     | 9     | 10  | 1   | 1    | 4       | 0                    | 0             | 0.0          | 11           |
| אסא          | NONGAHELA RIVER             |         |       |         |                  |         |     |       |       |     |     |      |         |                      |               |              |              |
| _OCK & DAH 2 | 2                           | 1       | 12    | 48      | 1                | 5       | 51  | 5     | 11    | 42  | 1   | 6    | 59      | 300                  | 11362         | 13.1         | 600          |
| _OCK & DAM 2 | 2 AUX 1                     | 1       | 8     | 30      | 1                | 2       | 13  | 5     | 6     | 10  | 1   | 2    | 12      | 13                   | 207           | 1.2          | 44           |
| LOCK & DAM 3 | 3                           | 1       | 11    | 47      | 2                | 5       | 21  | 7     | 9     | 20  | 2   | 6    | 17      | 487                  | 18316         | 15.3         | 180          |
| LOCK & DAM 3 | 3 AUXILIARY 1               | 1       | 7     | 30      | 1                | 2       | 12  | 6     | 7     | 17  | 1   | 3    | 15      | 19                   | 249           | 1.5          | 36           |
| LOCK & DAM 4 | 1                           | 1       | 11    | 42      | 1                | 7       | 19  | 1     | 10    | 21  | 1   | 8    | 41      | 342                  | 16639         | 19.0         | 228          |

| EROC DISTRICT NAME H4 PITTSBURGH |     |       | OH | VISION<br>NIO RIV | IER |      |        |    |         |    | 10/85 |     | MONTHS REPORTED<br>11/85 |                          | 12/85                     |                       |
|----------------------------------|-----|-------|----|-------------------|-----|------|--------|----|---------|----|-------|-----|--------------------------|--------------------------|---------------------------|-----------------------|
|                                  |     | APPRO |    |                   |     | PROC | ESSING |    | E (HIN. | .) |       | :   | ALL TIMES DELAYED TOWS   | EXPRESS<br>DELAY<br>TIME | SED IN MI<br>DELAY<br>AVG | NUTES<br>DELAY<br>MAX |
|                                  | HIN | AVG   |    |                   |     |      |        |    |         |    |       |     |                          | TONS                     | TONS                      | (ALL VSLS)            |
| MONONGAHELA RIVER                |     |       |    |                   |     |      |        |    |         |    |       |     |                          |                          |                           |                       |
| LOCK & DAM 4 AUXILIARY 1         | 1   | 10    | 47 | 1                 | 2   | 11   | 6      | 9  | 14      | 1  | 4     | 17  | 2                        | 43                       | 0.6                       | 65                    |
| MAXMELL LOCK & DAM               | 1   | 10    | 52 | 2                 | 7   | 24   | 6      | 11 | 37      | 2  | 8     | 25  | 102                      | 2254                     | 4.7                       | 95                    |
| MAXMELL LOCK & DAN AUX 1         | 1   | 12    | 33 | 1                 | 7   | 19   | 7      | 11 | 33      | 1  | 9     | 32  | 25                       | 385                      | 1.4                       | 47                    |
| LOCK & DAH 7                     | 1   | 5     | 32 | 1                 | 5   | 25   | 5      | 6  | 37      | 1  | 10    | 30  | 423                      | 30218                    | 42.3                      | 479                   |
| LOCK & DAH 8                     | 1   | 5     | 40 | i                 | 4   | 17   | 5      | 6  | 45      | 1  | 9     | 55  | 267                      | 11170                    | 17.7                      | 189                   |
| HORGANTOHN LOCK & DAM            | 2   | 5     | 20 | 2                 | 5   | 11   | 9      | 10 | 15      | 2  | 5     | 15  | 2                        | 20                       | 0.1                       | 15                    |
| HILDEBRAND LOCK & DAM            | 2   | 7     | 23 | 1                 | 3   | 17   | 5      | 15 | 42      | 2  | 4     | 10  | 5                        | 152                      | 2.1                       | 48                    |
| OPEKISKA LOCK & DAM              | 2   | 6     | 23 | 1                 | 3   | 10   | 10     | 11 | 20      | 2  | 4     | 14  | 0                        | 0                        | 0.0                       | 0                     |
| OHIO RIVER                       |     |       |    |                   |     |      |        |    |         |    |       |     |                          |                          |                           |                       |
| EMSHORTH LOCK & DAM              | 1   | 12    | 55 | 1                 | 6   | 65   | 8      | 13 | 43      | 2  | 9     | 60  | 374                      | 20445                    | 22.1                      | 324                   |
| EMSHORTH LOCK & DAM AUX 1        | 1   | 8     | 50 | 1                 | 3   | 10   | 5      | 8  | 20      | 2  | 3     | 10  | 16                       | 397                      | 1.6                       | 48                    |
| DASHIELDS LOCK & DAM             | 1   | 15    | 70 | 1                 | 9   | 34   | 5      | 11 | 37      | 2  | 12    | 72  | 312                      | 18308                    | 21.5                      | 302                   |
| DASHIELDS LOCK & DAM AUX 1       | 1   | 10    | 48 | 1                 | 3   | 12   | 5      | 6  | 24      | 1  | 3     | 23  | 23                       | 395                      | 1.8                       | 600                   |
| HONTGOHERY LOCK & DAM            | 1   | 11    | 65 | 1                 | 10  | 37   | 5      | 13 | 49      | 2  | 14    | 105 | <b>4</b> 26              | 32050                    | 36.3                      | 515                   |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED 10/85 12/85 OHIO RIVER 11/85 PITTSBURGH ALL TIMES EXPRESSED IN MINUTES LOCK PROCESSING TIME (MIN.) : DELAYED DELAY DELAY DELAY ENTRY CHAMBER EXIT : TOWS AVG TIME MAX APPROACH HIN AUG HAX : HIN AUG HAX : HIN AUG HAX : HIN AUG HAX : TONS TONS (ALL VSLS) OHIO RIVER HONTGOHERY LOCK & DAH AUX 1 1 7 37 1 3 11 1 5 30 12 272 2.0 52 NEW CUMBERLAND LOCK & DAM 2 21 56 1 7 25 38 1 13 33 147 5742 9.3 166 5 14 27 23 1.7 60 26 500 NEW CUMBERLAND LK & DAM AUX 1 13 59 1 3 22 5 13 51 211 8710 12.1 128 PIKE ISLAND LOCK & DAM 1 14 58 1 10 38 7 14 42 2 11 PIKE ISLAND LOCK & DAM AUX 1 1 10 31 1 5 18 54 18 344 1.4 57 5 13 36 HANNIBAL LOCKS & DAM 1 16 60 1 10 33 43 238 11788 15.8 261 5 15 1 11 HANNIBAL LOCKS & DAM AUX 1 1 11 45 1 22 5 7 15 25 0.8 52

# PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

| EROC      | DISTRIC   | T NAME     | DIVISION NAME          | 1            | ONTHS REPORTED |       |
|-----------|-----------|------------|------------------------|--------------|----------------|-------|
| К3        | JACKSON   | VILLE      | SOUTH ATLANTIC         | 10/85        | 11/85          | 12/85 |
| 20000     |           |            |                        |              |                |       |
| RIVER     |           | LCODE-LOCK | NAME                   | LEN/HID/DRAF | T (FT/FT/FT)   |       |
| CROSS FLA | BRG CNL   | 11-HENRY H | iolland Buckhan Lock   | 0600/0084/15 | .0             |       |
|           |           | 12-EUREKA  | LOCK                   | 0600/0084/15 | .0             |       |
|           |           | 13-INGLIS  | LOCK                   | 0600/0084/15 | .0             |       |
| CANAVERAL | HARBOR    | 21-CANAVER | AL LOCK                | 0600/0090/15 | .0             |       |
| OKEECHOBE | E WATRWAY | 01-ST LUCI | E LOCK & DAM           | 0250/0050/14 | .0             |       |
|           |           | 02-HOORE H | IAVEN LOCK             | 0250/0050/11 | .0             |       |
|           |           | 03-ORTONA  | LOCK & DAM             | 0250/0050/12 | .0             |       |
|           |           | 04-N P FRA | NKLIN LCK & CTRL STRCT | 0400/0056/14 | .0             |       |
|           |           | 05-PORT HA | YACA LOCK              | 0400/0056/14 | .0             |       |
| OKLANAHA  | RIVER     | 31-MOSS BL | UFF LOCK & DAN         | 0156/0030/55 | 0              |       |

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

| ROC DISTRIC         | T NAME DIVISION NAME            | HONTHS REPORTED          |    |
|---------------------|---------------------------------|--------------------------|----|
| 5 MOBILE            | SOUTH ATLANTIC                  | 10/85 11/85 12/          | 85 |
| IVER                | FCODE-FOCK NAME                 | LEN/WID/DRAFT (FT/FT/FT) |    |
| LABAMA-COOSA RIVERS | 11-CLAIBORNE LOCK & DAN         | 0600/0084/12.0           |    |
|                     | 12-HILLERS FERRY LOCK & DAM     | 0600/0084/12.0           |    |
|                     | 13-JONES BLUFF LOCK & DAM       | 0600/0084/12.0           |    |
| PLCH/CHTCH/FLNT RI  | 21-JIH HOODRUFF LOCK & DAH      | 0450/0082/12.0           |    |
|                     | 22-George H andrehs lock & Dah  | 0450/0082/12.0           |    |
|                     | 23-NALTER F GEORGE LOCK & DAM   | 0450/0082/12.0           |    |
| LKWAR/TOMBIGBEE RI  | 01-COFFEEVILLE LOCK             | 0600/0110/12.0           |    |
|                     | 02-DEMOPOLIS LOCK & DAM         | 0600/0110/12.0           |    |
|                     | 03-HARRIOR LOCK & DAM           | 0600/0110/12.0           |    |
|                     | 04-WILLIAM BACON OLIVER LK & DH | 0460/0095/12.0           |    |
|                     | 05-HOLT LOCK & DAM              | 0600/0110/12.0           |    |
|                     | 06-JOHN HOLLIS BANKHEAD LK & DH | 0600/0110/12.0           |    |
| EARL RIVER          | 31-LOCK 1                       | 0310/0065/ 9.0           |    |
|                     | 32-LOCK 2                       | 0310/0065/ 9.0           |    |
|                     | 33-LOCK 3                       | 0310/0065/ 9.0           |    |
| ENN TOMBIGBEE HATER | HAY41-GAINESVILLE LOCK & DAM    | 0600/0110/12.0           |    |
|                     | 42-ALICEVILLE LOCK & DAM        | 0600/0110/12.0           |    |
|                     | 43-COLUMBUS LOCK & DAM          | 0600/0110/12.0           |    |
|                     | 44-ABERDEEN LOCK & DAM          | 0600/0110/12.0           |    |
|                     | 45-lock a                       | 0600/0110/12.0           |    |
|                     | 46-LOCK B                       | 0600/0110/12.0           |    |
|                     | 47-LOCK C                       | 0600/0110/12.0           |    |
|                     | 48-LOCK D                       | 0600/0110/12.0           |    |
|                     | 49-LOCK E                       | 0600/0110/12.0           |    |
|                     | 50-BAY SPRINGS                  | 0600/0110/12.0           |    |

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR HATER RESOURCES

EROC

DISTRICT NAME Savannah

DIVISION NAME SOUTH ATLANTIC

MONTHS REPORTED

10/85 11/85 12/85

LEN/WID/DRAFT (FT/FT/FT)

RIVER LCODE-LOCK NAME
SAVANNAH RIVER 01-NEH SAVANNAH BLUFF LOCK & DAM

0360/0056/12.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

EROC DISTRICT NAME DIVISION NAME
K7 WILMINGTON SOUTH ATLANTIC 10/85

HONTHS REPORTED 11/85

12/85

RIVER CAPE FEAR RIVER LCODE-LOCK NAME 01-LOCK & DAM 1

02-LOCK & DAM 2

03-WILLIAM D HUSKE LOCK & DAM

LEN/WID/DRAFT (FT/FT/FT)

0200/0040/10.0 0200/0040/10.0 0300/0040/10.0

ACCOUNT TO THE PROPERTY OF THE PARTY AND THE PARTY OF THE

| EROC      | DISTRICT NAME    |      | DIVI            | SION NAP       | Œ              |                |               |                 | HC               | INTHS REF               |                 |                         |                    |
|-----------|------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|-------------------------|-----------------|-------------------------|--------------------|
| K7        | HILHINGTON       |      | Sout            | H ATLANT       | TIC            |                |               | 10/8            | 35<br>           | 11/8                    | )5<br>          | 12                      | ?/85<br>           |
| RIVER/LOC | ek name          | TONS | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>ENPTY | BARGS<br>Full | BARGES<br>Total | LCKGES<br>Conner | LCKGES<br>RECRTN<br>(NA | LCKGES<br>OTHER | LCKGES<br>Total<br>(TC) | Tonnage<br>(Ktons) |
|           | CAPE FEAR RIVER  |      |                 |                |                |                |               |                 |                  |                         |                 |                         |                    |
| LOCK & DA | <b>н</b> 1       | ×    | t X             |                |                |                |               |                 |                  |                         |                 |                         |                    |
| UPBOUND   | STATISTICS       | 11   | 0               | 0              | 11             | 0              | 11            | 11              | 22               | 0                       | 1               | 23                      | 12                 |
| DNBOUND   | STATISTICS       | 11   | 2               | 0              | 13             | 11             | 0             | 11              | 23               | 1                       | 0               | 24                      | 0                  |
| TOTAL     |                  | 22   | 2               | 0              | 24             | 11             | 11            | 22              | 45               | 1                       | 1               | 47                      | 12                 |
| LOCK & DA | Н 2 ·            | X    | KX              |                |                |                |               |                 |                  |                         |                 |                         |                    |
| UPBOUND   | STATISTICS       | 11   | 0               | 0              | 11             | 0              | 11            | 11              | 21               | 0                       | 0               | 21                      | 11                 |
| DNBOUND   | STATISTICS       | 11   | . 2             | 0              | 13             | 11             | 0             | 11              | 22               | 1                       | 0               | 23                      | 0                  |
| TOTAL     |                  | 22   | 2               | 0              | 24             | 11             | 11            | 22              | 43               | 1                       | 0               | 44                      | 11                 |
| WILLIAM O | HUSKE LOCK & DAM | X:   | KX.             | •              | •              |                |               |                 |                  |                         |                 |                         |                    |
| UPBOUND   | STATISTICS       | 11   | 0               | 0              | 11             | 0              | 11            | 11              | 11               | 0                       | 0               | 11                      | 10                 |
| DNBOUND   | STATISTICS       | 11   | 2               | 0              | 13             | 11             | 0             | 11              | 11               | 1                       | 0               | 12                      | 0                  |
| TOTAL     |                  | 22   | 2               | 0              | 24             | 11             | 11            | 22              | 22               | 1                       | 0               | 23                      | 10                 |

| EROC<br>K7 | C DISTRICT NAME DIVISION NAME NILMINGTON SOUTH ATLANTIC |     |              |              |     |                     |     |    |                      |                    |   | 10/8        |       | MONTHS REPO                  |                                    | 12.                               | /85                         |
|------------|---|-----|--------------|--------------|-----|---------------------|-----|----|----------------------|--------------------|---|-------------|-------|------------------------------|------------------------------------|-----------------------------------|-----------------------------|
|            |   | MIN | APPRO<br>AVG | ACH<br>HAX : | MIN | LOCK<br>ENTR<br>AVG | Y   |    | TIME<br>HAMBE<br>AVG | (MIN.<br>R<br>MAX: |   | EXIT<br>AVG | MAX : | ALL TIMES<br>DELAYED<br>TOMS | S EXPRESS<br>DELAY<br>TIME<br>TOWS | SED IN MI<br>DELAY<br>AVG<br>TOWS | INUTES DELAY HAX (ALL VSLS) |
|            | CAPE FEAR RIVER   |     |              |              |     |                     |     |    |                      |                    |   |             |       |                              |                                    |                                   |                             |
| FOCK & D   | AH 1  | 5   | 5            | 10           | 5   | 5                   | 10  | 5  | 13                   | 15                 | 5 | 5           | 15    | 3                            | 15                                 | 0.6                               | 5                           |
| LOCK & D   | AM 2  | 5   | 5            | 5            | 5   | 5                   | 5   | 5  | 11                   | 25                 | 5 | 7           | 15    | 22                           | 230                                | 10.4                              | 125                         |
| WILLIAM    | O HUSKE LOCK & DAM                                      | 5   | 5            | 5            | 5   | 5                   | - 5 | 25 | 25                   | 25                 | 5 | 5           | 5     | 22                           | 108                                | 4.9                               | 5                           |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR WATER RESOURCES

EROC

DISTRICT NAME SACRAMENTO

DIVISION NAME

**HONTHS REPORTED** 

L2

SOUTH PACIFIC

10/85 11/85

12/85

RIVER

LCODE-LOCK NAME SCRINTO DHISHP CHINL 01-BARGE CANAL LOCK LEN/WID/DRAFT (FT/FT/FT)

0640/0086/23.0

NO DATA RECORDED ON SUMMRY FILE FOR THIS PERIOD

NO DATA RECORDED ON LCKAGE FILE FOR THIS PERIOD

PAGE A 68

TABLE 1

| EROC     | DISTRICT NA  | ME DIVISION NAME           | HON            | THS REPORTED |       |
|----------|--------------|----------------------------|----------------|--------------|-------|
| ) H3     | GALVESTON    | SOUTHMESTERN               | 10/85          | 11/85        | 12/85 |
| }        |              |                            |                |              |       |
| RIVER    | L            | CODE-LOCK NAME             | LEN/HID/DRAFT  | (FT/FT/FT)   |       |
| GULF INT | TRACOASTAL 1 | 1-COLORADO RIVER EAST LOCK | 1200/0075/15.0 |              |       |
|          | 1:           | 2-COLORADO RIVER HEST LOCK | 1200/0075/15.0 |              |       |
| }        | 1:           | 3-Brazos east gate         | 9999/0075/15.0 |              |       |
| }        | 1            | 4-BRAZOS HEST GATE         | 9999/0075/15.0 |              |       |
| }        |              |                            |                |              |       |

TABLE 2

| EROC<br>M3 | DISTRICT NAME<br>Galveston |      |                 | SION NAM       |                |                |               | 10/8            |                  | NTHS REF<br>11/8         |                 | 12                      | 2/ <b>85</b>       |
|------------|----------------------------|------|-----------------|----------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|-----------------|-------------------------|--------------------|
| RIVER/LOCK | NAME                       | TONS | VESSL<br>Recrtn | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>FULL | BARGES<br>TOTAL | LCKGES<br>Conner | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER | LCKGES<br>Total<br>ETC) | Tonnage<br>(Ktons) |
| G          | CULF INTRACOASTAL          |      |                 |                |                |                |               |                 |                  |                          |                 |                         |                    |
| COLORADO R | IVER EAST LOCK             | XX   | II.             |                |                |                |               |                 |                  |                          |                 |                         |                    |
| UPBOUND S  | STATISTICS                 | 985  | 1060            | 143            | 2188           | 634            | 1486          | 2120            | 280              | 0                        | 795             | 1075                    | 3406               |
| DNBOUND S  | TATISTICS                  | 1003 | 1020            | 108            | 2131           | 1298           | 736           | 2034            | 188              | 0                        | 884             | 1072                    | 1406               |
| TOTAL      |                            | 1988 | 2080            | 251            | 4319           | 1932           | 2222          | 4154            | 468              | 0                        | 1679            | 2147                    | 4812               |
| COLORADO F | IVER HEST LOCK             | X1   | EX              |                |                |                |               |                 |                  |                          |                 |                         |                    |
| UPBOUND S  | TATISTICS                  | 958  | 2268            | 170            | 3396           | 605            | 1481          | 2086            | 175              | 7                        | 885             | 1067                    | 3408               |
| DNBOUND S  | TATISTICS                  | 977  | 2377            | 136            | 3490           | 1305           | 685           | 1990            | 155              | 6                        | 896             | 1057                    | 1338               |
| TOTAL      |                            | 1935 | 4645            | 306            | 6886           | 1910           | 2166          | 4076            | 330              | 13                       | 1781            | 2124                    | 4747               |
| BRAZOS EAS | ST GATE                    | X1   | t X             | •              | •              |                |               |                 |                  |                          |                 |                         |                    |
|            | STATISTICS                 | 1182 | 175             | 381            | 1738           | 535            | 1467          | 2002            | 3                | 0                        | 1209            | 1212                    | 3078               |
| DNBOUND S  | TATISTICS                  | 1227 | 276             | 366            | 1869           | 1357           | 815           | 2172            | 4                | 0                        | 1252            | 1256                    | 1436               |
| TOTAL      |                            | 2409 | 451             | 747            | 3607           | 1892           | 2282          | 4174            | 7                | 0                        | 2461            | 2468                    | 4515               |
| BRAZOS HES | T GATE                     | ×    | X X             |                |                |                |               |                 |                  |                          |                 |                         |                    |
| UPBOUND S  | TATISTICS                  | 1155 | 283             | 312            | 1750           | 568            | 1445          | 2013            | 6                | . 0                      | 1167            | 1173                    | 3019               |
| DNBOUND S  | TATISTICS                  | 1200 | 306             | 353            | 1859           | 1310           | 800           | 2110            | 3                | 1                        | 1220            | 1224                    | 1443               |
| TOTAL      |                            | 2355 | 589             | 665            | 3609           | 1878           | 2245          | 4123            | 9                | 1                        | 2387            | 2397                    | 4462               |

| EROC      | DISTRICT NAME     |     |              | DIV   | ISION  | NAME         |    |        |               |       |     |      |       | HONTHS REPO                  | RTED                     |                          |                  |
|-----------|-------------------|-----|--------------|-------|--------|--------------|----|--------|---------------|-------|-----|------|-------|------------------------------|--------------------------|--------------------------|------------------|
| M3        | GALVESTON         |     |              | SOL   | ITHNES | TERN         |    |        |               |       |     | 10/8 | 5     | 11/85                        |                          | 12/                      | 85               |
|           |                   |     | ADDDO        |       |        | LOCK<br>ENTR |    | ESSING | TINE<br>HAMBE |       | .)  | EXIT | :     | ALL TIMES<br>DELAYED<br>TOWS | EXPRESS<br>DELAY<br>TIME | ED IN MI<br>DELAY<br>AVG | INUTES DELAY HAX |
|           |                   | MIN | APPRO<br>AVG | MAX : | MIN    | AVG          |    |        | AVG           | MAX : | HIN |      | MAX : | IUNO                         | TONS                     | TOHS                     | (ALL VSLS)       |
|           | GULF INTRACOASTAL |     |              |       |        |              |    |        |               |       |     |      |       |                              |                          |                          |                  |
| COLORADO  | RIVER EAST LOCK   | 1   | 1            | 17    | 1      | 1            | 21 | 1      | 4             | 60    | 1   | 1    | 62    | 1988                         | 3956                     | 1.9                      | 18               |
| COLORADO  | RIVER WEST LOCK   | 1   | 2            | 13    | 1      | 1            | 12 | 1      | 3             | 58    | 1   | 1    | 32    | 1933                         | 3606                     | 1.8                      | 13               |
| Brazos e  | AST GATE          | 1   | 1            | 20    | 1      | 1            | 37 | 1      | 0             | 3     | 1   | 1    | 61    | 2400                         | 4968                     | 2.0                      | 555              |
| BRAZOS HI | EST GATE          | 1   | 1            | 63    | 1      | 1            | 14 | 1      | 0             | 3     | 1   | 1    | 61    | 2348                         | 5028                     | 2.1                      | 600              |

| EROC DIST      | RICT NAME DIVISION NAME       | •            | MONTHS REPORTED |       |
|----------------|-------------------------------|--------------|-----------------|-------|
| M4 LITT        | LE ROCK SOUTHWESTERN          | 10/85        | 11/85           | 12/85 |
| RIVER          | LCODE-LOCK NAME               | I FN/UTD/DRA | FT (FT/FT/FT)   |       |
| ARKANSAS RIVER | 01-NORRELL LOCK & DAM         | 0600/0110/12 |                 | •     |
| MUNMONO KIVEK  | 02-LOCK & DAM 2               | 0600/0110/12 | · -             |       |
|                | 03-LOCK & DAM 3               | 0600/0110/12 | •0              |       |
|                | 04-LOCK & DAM 4               | 0600/0110/12 | .0              |       |
|                | 05-LOCK & DAN 5               | 0600/0110/12 | .0              |       |
|                | 06-DAVID D TERRY LOCK & DAM   | 0600/0110/12 | .0              |       |
|                | 07-HURRAY LOCK & DAN          | 0600/0110/12 | .0              |       |
|                | 08-TOAD SUCK FERRY LOCK & DAM | 0600/0110/12 | •0              |       |
|                | 09-LOCK & DAM 9               | 0600/0110/12 | .0              |       |
|                | 10-DARDAMELLE LOCK & DAM      | 0600/0110/12 | .0              |       |
|                | 11-OZARK LOCK & DAH           | 0600/0110/12 | •0              |       |
|                | 13-LOCK & DAM 13              | 0600/0110/12 | .0              |       |



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TABLE 2

| EROC DISTRICT NA<br>H4 LITTLE ROCK    |            |                 | ISION NAV      |                |                | 2000               | 10/8            |            | NTHS REP  |          | 12                  | /85                  |
|---------------------------------------|------------|-----------------|----------------|----------------|----------------|--------------------|-----------------|------------|-----------|----------|---------------------|----------------------|
| RIVER/LOCK NAME                       | TONS       | VESSL<br>RECRTN | VESSL<br>OTHER | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full      | BARGES<br>Total |            | RECRTN    |          | TOTAL               | TONNACE<br>(KTONG)   |
| ARKANSAS RIVER                        |            |                 |                |                |                |                    |                 |            |           |          |                     |                      |
| NORRELL LOCK & DAN                    | <b>x</b> : | XX              |                |                |                |                    |                 |            |           |          |                     |                      |
| UPBOUND STATISTICS                    | 148        | 16              | 49             | 213            | 325            | 312                | 637             | 124        | 14        | 78       | 216                 | 421                  |
| DNBOUND STATISTICS                    | 146        | 22              | 34             | 202            | 94             | 477                | 571             | 111        | 21        | 78       | 210                 | 621                  |
| TOTAL                                 | 294        | 38              | 83             | 415            | 419            | 789                | 1208            | 235        | 35        | 156      | 426                 | 1117                 |
|                                       |            |                 |                |                |                |                    |                 |            |           |          |                     | •                    |
| LOCK & DAM 2                          | X          |                 |                |                |                |                    |                 |            |           |          |                     | _                    |
| UPBOUND STATISTICS                    | 144        | 23              | 27             | 194            | 327            | 278                | 605             | 169        | 19        | 23       | 211                 | 407                  |
| DNBOUND STATISTICS                    | 149        | 27              | 15             | 191            | 105            | 488                | 593             | 163        | 23        | 15       | 201                 | 891                  |
| TOTAL                                 | 293        | 50              | 42             | 385            | 432            | 766                | 1198            | 332        | 42        | 38       | 412                 | 1078                 |
| LOCK & DAN 3                          | ₩!         | XX              |                |                |                |                    |                 |            |           |          |                     |                      |
| UPBOUND STATISTICS                    | 123        | 35              | 19             | 177            | 278            | 356                | 634             | 135        | 26        | 31       | 192                 | 397                  |
| DNBOUND STATISTICS                    | 127        | 39              | 16             | 182            | 100            | 443                | 543             | 142        | 30        | 30       | 202                 | 615                  |
| TOTAL                                 | 250        | 74              | 35             | 359            | 378            | 799                | 1177            | 277        | 56        | 61       | 394                 | 1013                 |
| LOCK & DAM 4                          | <b>T</b>   | EX              |                |                |                |                    |                 |            |           |          |                     |                      |
| UPBOUND STATISTICS                    | 117        | 31              | 21             | 169            | 270            | 300                | 570             | 130        | 23        | 30       | 183                 | 398                  |
| DNBOUND STATISTICS                    | 131        | 33              | 15             | 179            | 100            | 446                | 546             | 148        | 26        | 22       | 196                 | 625                  |
| TOTAL                                 | 248        | 64              | 36             | 348            | 370            | 746                | 1116            | 278        | 49        | 52       | 379                 | 1023                 |
| LOOK A BAY 5                          |            |                 |                |                |                |                    |                 |            |           |          |                     |                      |
| LOCK & DAM 5                          | 10/        |                 | 10             | 173            | 100            | 2/5                | 4/4             | 115        | 20        | ••       | 475                 | 420                  |
| UPBOUND STATISTICS                    | 106<br>120 | 57<br>62        | 10<br>6        | 173<br>188     | 199            | 265<br>271         | 464<br>472      | 113        | 39<br>40  | 11.      | 163                 | 430                  |
| DNBOUND STATISTICS TOTAL              | 120<br>226 | 62<br>119       | 6<br>16        | 361            | 101<br>300     | 371<br>636         | 472<br>936      | 126<br>239 | 48<br>87  | 12<br>23 | 186<br>3 <b>4</b> 9 | 611<br>1 <b>04</b> 2 |
| IVIAL                                 | 220        | 117             | 10             | 301            | 300            | 030                | 730             | £37        | 0/        | 23       | J <b>47</b>         | 1045                 |
| DAVID D TERRY LOCK & DAM              | X)         | EX              |                |                |                |                    |                 |            |           |          |                     |                      |
| UPBOUND STATISTICS                    | 110        | 125             | 10             | 245            | 212            | 261                | 473             | 115        | 69        | 7        | 191                 | 356                  |
| DNBOUND STATISTICS                    | 122        | 131             | 10             | 263            | 98             | 378                | 476             | 132        | 73        | 8        | 213                 | 619                  |
| TOTAL                                 | 232        | 256             | 20             | 508            | 310            | 639                | 949             | 247        | 142       | 15       | 404                 | 975                  |
| MINDRAY LOOP A DAY                    |            |                 |                |                |                |                    |                 |            |           |          |                     |                      |
| HURRAY LOCK & DAM                     | <b>X</b> 1 |                 | 0              | 240            | 1.60           | 200                | 264             | 07         | 1 A       | 7        | 150                 | 207                  |
| UPBOUND STATISTICS DNBOUND STATISTICS | 79<br>89   | 162<br>154      | 8<br>7         | 249<br>250     | 142            | 208                | 350<br>373      | 87<br>00   | 64        | 7        | 158                 | 287                  |
| TOTAL STATISTICS                      | 168        | 316             | 15             | 250<br>499     | 83<br>225      | 290<br><b>49</b> 8 | 373<br>723      | 99<br>186  | 84<br>140 | 7<br>14  | 190<br>3 <b>48</b>  | 511<br>7 <b>99</b>   |
| IUIME.                                | 100        | 310             | 13             | 777            | 223            | 470                | / 23            | 100        | 148       | 14       | 346                 | /17                  |
| TOAD SUCK FERRY LOCK & D              | AK XI      | IX.             |                |                |                |                    |                 |            |           |          |                     |                      |
| UPBOUND STATISTICS                    | 77         | 27              | 4              | 108            | 138            | 202                | 340             | 82         | 25        | 8        | 115                 | 265                  |
| DNBOUND STATISTICS                    | 91         | 36              | 3              | 130            | 79             | 307                | 386             | 97         | 30        | 11       | 138                 | 519                  |
| TOTAL                                 | 168        | 63              | 7              | 238            | 217            | 509                | 726             | 179        | 55        | 19       | 253                 | 795                  |
|                                       |            |                 |                |                |                |                    | _ <b>-</b>      |            |           | - "      | <b>-</b>            |                      |

TABLE 2

| EROC<br>H4 | DISTRICT NAME<br>LITTLE ROCK |      |                 | SION NAM<br>HWESTERN |                |                |               | 10/8            |                  | NTHS REF<br>11/8         |                 | 12    | 2/85               |
|------------|------------------------------|------|-----------------|----------------------|----------------|----------------|---------------|-----------------|------------------|--------------------------|-----------------|-------|--------------------|
| RIVER/LOC  | K NAME                       | TONS | VESSL<br>RECRTN | VESSL<br>OTHER       | VESSL<br>TOTAL | BARGS<br>EMPTY | BARGS<br>Full | BARGES<br>TOTAL | LCKGES<br>Commer | LCKGES<br>RECRTN<br>(NAV | LCKGES<br>OTHER | TOTAL | Tonnage<br>(Ktons) |
|            | ARKANSAS RIVER               |      |                 |                      |                |                |               |                 |                  |                          |                 |       |                    |
| LOCK & DA  | M 9                          | X    | EX              |                      |                |                |               |                 |                  |                          |                 |       |                    |
| UPBOUND    | STATISTICS                   | 75   | 14              | 2                    | 91             | 137            | 206           | 343             | 77               | 14                       | 22              | 113   | 297                |
| DNBOUND    | STATISTICS                   | 85   | 22              | 3                    | 110            | 78             | 297           | 375             | 91               | 15                       | 22              | 128   | 515                |
| TOTAL      |                              | 160  | 36              | 5                    | 201            | 215            | 503           | 718             | 168              | 29                       | 44              | 241   | 813                |
| DARDANELL  | E LOCK & DAM                 | X    | KX              |                      |                |                |               |                 |                  |                          |                 |       |                    |
| UPBOUND    | STATISTICS                   | 89   | 21              | 8                    | 118            | 151            | 209           | 360             | 94               | 16                       | 8               | 118   | 294                |
| DNBOUND !  | STATISTICS                   | 90   | . 23            | 14                   | 127            | <i>7</i> 5     | 289           | 364             | 105              | 17                       | 8               | 130   | 508                |
| TOTAL      |                              | 179  | 44              | 22                   | 245            | 226            | 498           | 724             | 199              | 33                       | 16              | 248   | 802                |
| OZARK LOC  | K & DAN                      | X)   | EX              | •                    |                |                |               |                 |                  |                          |                 |       |                    |
| UPBOUND    | STATISTICS                   | 82   | 8               | 4                    | 94             | 142            | 214           | 356             | 87               | 7                        | 9               | 103   | 295                |
| DNBOUND    | STATISTICS                   | 86   | 10              | 5                    | 101            | 70 ·           | 282           | 352             | 95               | 10                       | 11              | 116   | 504                |
| TOTAL      |                              | 168  | 18              | 9                    | 195            | 212            | 496           | 708             | 182              | 17                       | 20              | 219   | 800                |
| LOCK & DAI | H 13                         | XI   | KX              |                      |                |                |               |                 |                  |                          |                 |       |                    |
|            | STATISTICS                   | 168  | 12              | 9                    | 189            | 149            | 360           | 509             | 176              | 10                       | 18              | 204   | 368                |
| DNBOUND !  | STATISTICS                   | 170  | 18              | 13                   | 201            | 215            | 287           | 502             | 181              | 12                       | 20              | 213   | 494                |
| TOTAL      |                              | 338  | 30              | 22                   | 390            | 364            | 647           | 1011            | 357              | 22                       | 38              | 417   | 863                |

| EROC DISTRICT NAME H4 : LITTLE ROCK |     |              |    | EVISION<br>DUTHNES |       |        |        | ••    |        |   | 10/         | 85<br>    | HONTHS REPO  |                       | 12/                  | ′85<br>                    |
|-------------------------------------|-----|--------------|----|--------------------|-------|--------|--------|-------|--------|---|-------------|-----------|--------------|-----------------------|----------------------|----------------------------|
|                                     |     |              |    |                    | ı acı | , DDUC | ·F66TM | TTM   | - /V+V |   |             |           | ALL TIMES    |                       |                      |                            |
|                                     | NIN | APPRO<br>AVG |    | : HIN              | ENTR  | Y      |        | HAMBE | R      |   | EXIT<br>AVG |           | DELAYED TOWS | DELAY<br>TIME<br>TOWS | DELAY<br>AVG<br>TOHS | DELAY<br>MAX<br>(ALL VSLS) |
| arkansas river                      |     |              |    |                    |       |        |        |       |        |   |             |           |              |                       |                      |                            |
| NORRELL LOCK & DAN                  | 1   | 7            | 80 | 1                  | 6     | 35     | 1      | 7     | 20     | 1 | 6           | 35        | 13           | 359                   | 1.2                  | 70                         |
| LOCK & DAN 2                        | 1   | 8            | 30 | 1                  | 8     | 38     | 1      | 10    | 25     | 1 | 9           | 55        | 40           | 1369                  | 4.6                  | 138                        |
| LOCK & DAN 3                        | 1   | 8            | 60 | 1                  | 7     | - 30   | 5      | 9     | 60     | 1 | 7           | 35        | 22           | 448                   | 1.7                  | 70                         |
| LOCK & DAM 4                        | 1   | 9            | 45 | 1                  | 6     | 36     | 5      | 9     | 55     | 1 | 8           | 77        | 28           | 675                   | 2.7                  | 48                         |
| LOCK & DAM 5                        | 1   | 9            | 53 | 1                  | 7     | 33     | 5      | 10    | 31     | 1 | 9           | <b>37</b> | 59           | 688                   | 3.0                  | 44                         |
| DAVID D TERRY LOCK & DAM            | 1   | 9            | 44 | 1                  | 7     | 40     | 2      | 11    | 347    | 1 | 8           | 101       | 23           | 1502                  | 6.4                  | 394                        |
| HURRAY LOCK & DAN                   | 1   | 8            | 47 | 1                  | 6     | 30     | 5      | 9     | 36     | 1 | 7           | 41        | 17           | 639                   | 3.8                  | 155                        |
| TOAD SUCK FERRY LOCK & DAM          | 1   | 8            | 45 | 1                  | 7     | 39     | 5      | 9     | 27     | 1 | 8           | 30        | 43           | 563                   | 3.3                  | 55                         |
| LOCK & DAM 9                        | 1   | 12           | 32 | 1                  | 9     | 51     | 6      | 11    | 43     | 1 | 9           | 33        | 19           | 258                   | 1.6                  | 64                         |
| DARDANELLE LOCK & DAM               | 1   | 12           | 39 | 1                  | 7     | 33     | 5      | 13    | 30     | 1 | 7           | 33        | 150          | 1148                  | 6.4                  | 54                         |
| OZARK LOCK & DAM                    | 2   | 11           | 30 | 2                  | 10    | 65     | 5      | 12    | 40     | 3 | 10          | 40        | 136          | 1335                  | 7.9                  | 65                         |
| LOCK & DAM 13                       | 1   | 7            | 30 | 1                  | 7     | 32     | 5      | 11    | 265    | 2 | 9           | 210       | 63           | 1656                  | 4.8                  | 82                         |

#### PERFORMANCE MONITORING SYSTEM (PMS) QUARTERLY REPORT FOR THE PERIOD 10/85 THROUGH 12/85 INSTITUTE FOR MATER RESOURCES

0600/0110/14.0

EROC DISTRICT NAME DIVISION NAME MONTHS REPORTED
N5 TULSA SOUTHHESTERN 10/85 11/85 12/85

RIVER LCODE-LOCK NAME LEN/HID/DRAFT (FT/FT/FT)

ARKANSAS RIVER 21-H D MAYO LOCK & DAM 0600/0110/14.0
22-ROBERT S KERR LOCK & DAM &RES 0600/0110/14.0
23-HEBBERS FALLS LOCK & DAM 0600/0110/14.0
24-CHOUTEAU LOCK & DAM 0600/0110/14.0

25-NEHT GRAHAM LOCK & DAM

| EROC<br>H5                                       | DISTRICT NAME<br>TULSA |                 | SOUT            | SION NAM        |                   |                  |                   | 10/8              |                  | NTHS REP<br>11/8   |               | 12                     | /85<br>                         |
|--|------------------------|-----------------|-----------------|-----------------|-------------------|------------------|-------------------|-------------------|------------------|--------------------|---------------|------------------------|---------------------------------|
| RIVER/LOCK                                       | NAME                   | TOHS            | VESSL<br>RECRTN | VESSL<br>OTHER  | VESSL<br>TOTAL    | BARGS<br>ENPTY   | BARGS<br>FULL     | BARGES<br>Total   | LCKGES<br>Commer |                    |               | LCKGES<br>TOTAL<br>TC) | To <del>nn</del> age<br>(Ktons) |
| AF   | RKANSAS RIVER          |                 |                 |                 |                   |                  |                   |                   |                  |                    |               |                        |                                 |
| N D MAYO LO<br>UPBOUND ST<br>DNBOUND ST<br>TOTAL | TATISTICS              | 81<br>83<br>164 | 28<br>26<br>54  | 12<br>15<br>27  | 121<br>124<br>245 | 150<br>65<br>215 | 202<br>259<br>461 | 352<br>324<br>676 | 86<br>94<br>180  | 13<br>11<br>24     | 4<br>5<br>9   | 103<br>110<br>213      | 274<br>524<br>798               |
| ROBERT S KE<br>UPBOUND ST<br>DNBOUND ST<br>TOTAL |                        | 81<br>82<br>163 | 23              | 8<br>. 10<br>18 | 112<br>118<br>230 | 146<br>67<br>213 | 194<br>261<br>455 | 340<br>328<br>668 | 86<br>93<br>179  | 20<br>22<br>42     | 4<br>5<br>9   | 110<br>120<br>230      | 274<br>466<br>740               |
| HEBBERS FAL<br>UPBOUND ST<br>DNBOUND ST<br>TOTAL |                        | 75<br>81<br>156 | 12<br>13<br>25  | 6<br>4<br>10    | 93<br>98<br>191   | 125<br>85<br>210 | 185<br>230<br>415 | 310<br>315<br>625 | 79<br>87<br>166  | 12<br>13<br>25     | 7<br>7<br>14  | 98<br>107<br>205       | 266<br>416<br>682               |
| CHOUTEAU LO<br>UPBOUND ST<br>DNBOUND ST<br>TOTAL | TATISTICS              | 76<br>78<br>154 | 4<br>6<br>10    | 7<br>3<br>10    | 87<br>87<br>174   | 142<br>66<br>208 | 127<br>210<br>337 | 269<br>276<br>545 | 82<br>83<br>165  | 3<br>4<br>7        | 4<br>6<br>10  | 89<br>93<br>182        | 178<br>393<br>571               |
| NEHT GRAHAM<br>UPBOUND ST<br>DNBOUND ST<br>TOTAL |                        | 75<br>77<br>152 | 6<br>8<br>14    | 4<br>5<br>9     | 85<br>90<br>175   | 135<br>70<br>205 | 127<br>213<br>340 | 262<br>283<br>545 | 78<br>82<br>160  | <b>4</b><br>5<br>9 | 3 ·<br>3<br>6 | 85<br>90<br>175        | 176<br>377<br>554               |

| EROC DISTRICT NAME           |            |              |        | IVISION |       | :  |              |        |      |            |             |         | MONTHS RE |                             |                                   |                          |
|------------------------------|------------|--------------|--------|---------|-------|----|--------------|--------|------|------------|-------------|---------|-----------|-----------------------------|-----------------------------------|--------------------------|
| M5 TULSA                     |            |              | 50<br> | DUTHNES | STERN |    |              |        |      |            | 10/8        | .55<br> | 11/       | ′85<br>                     | 12/                               | /85<br>                  |
|                              | nin        | APPRO<br>AVG |        | : NIN   | ENTR  | RY | CESSING<br>C | CHAMBE | ER . | )<br>HIH : | EXIT<br>AVG |         | : DELAYED | MES EXPRESS DELAY TIME TOMS | SED IN MI<br>DELAY<br>AVG<br>TOMS | INUTES DELAY HAX (ALL VS |
| ARKANSAS RIVER               |            |              |        |         |       |    |              |        |      |            |             |         |           |                             |                                   |                          |
| H D HAYO LOCK & DAM          | 2          | 12           | 45     | 1       | 9     | 29 | 5            | 10     | 35   | 1          | 10          | 40      | 1         | 22                          | 0.1                               | 22                       |
| ROBERT S KERR LOCK & DAM &RE | <b>. 2</b> | 7            | 23     | 2       | 8     | 30 | 6            | 14     | 21   | 2          | 9           | 41      | 8         | 359                         | 2.2                               | 125                      |
| WEBBERS FALLS LOCK & DAM     | 1          | 12           | 30     | 1       | 9     | 30 | 8            | 19     | 50   | 2          | 9           | 36      | 81        | 1290                        | 8.2                               | 81                       |
| CHOUTEAU LOCK & DAM          | 2          | 10           | 64     | 1       | 7     | 30 | 11           | 15     | 27   | 2          | 9           | 45      | 16        | 61                          | 0.3                               | 15                       |
| NEHT GRAHAM LOCK & DAM       | 2          | 11           | 42     | 2       | 9     | 32 | 8            | 14     | 29   | 2          | 15          | 50      | 14        | 284                         | 1.8                               | 52                       |

#### Appendix B

#### Glossary

Draft: This is not a physical lock dimension. It is compared with new data before it is added to the central library to ensure that vessel drafts are not recoreded improperly.

Tows: Only tows with barges are included with this figure. Tows without barges (light boats) and other commercial vessels are counted as "other vessels."

Other vessels: All vessels other than tows with barges and recreational vessels.

Commercial lockages: The number of lockages for which the prime mover is a tow, a light boat, or another commercial vessel.

Recreational lockages: The number of lockages during which there are only recreational vessels using a lock.

Other lockages: The number of lockages during which the prime mover is a government vessel, a government contracted vessel (such as a dredge) or an unidentified type of vessel. Also included in this category are navigable and open pass lockages.

Total lockages: A lockage includes all lock activity necessary to processa tow and is counted only once when more than one vessel uses the lock. Thus, both cuts of a double cut lockage (e.g. only part of the tow will fit in the lock and it is necessary to process the tow in two pieces) count as a single lockage together and the count increases by only one when two tows are processed during a single lockage.

Processing time: Only the times needed to process tows with barges are included in these statistics.

Delayed vessels: Number of tows experiencing delay between arrival time and the time the lock is ready to process them.

Average delay: Average time of delay for all tows.

Maximum delay: Maximum delay time for vessels. This figure may reflect a single, extraordinary circumstance and should be evaluated accordingly.

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